PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	GARY A. KASPER ET AL.		
For:	SURFACE CLEANER WITH POWER DRIVE		
Serial No.:	10/064,723	Examiner:	Theresa T. Snider
Filed:	August 9, 2002	Group Art Unit:	1744
Atty. Docket:	71189-1423	Confirmation No.:	4232

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

☒ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, Alexandria, VA 22313-1450.

Date: July 31, 2006

☐ transmitted by facsimile to the Patent and Trademark Office. to Office of Patent Legal Administration c/o Central Fax Number at 571-273-8300.

Signature

Christine M. Judge
(type or print name of person certifying)

Commissioner for Patents
Office of Patent Legal Administration
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

REQUEST FOR RECONSIDERATION OF PATENT TERM ADJUSTMENT UNDER 35 U.S.C. § 154 AND 37 C.F.R. § 1.705(D)

In accordance with 37 C.F.R. § 1.705(d), Applicant hereby requests a reconsideration of a determination of patent term adjustment under 35 U.S.C. § 154(b). This request for reconsideration is timely filed because it is filed within 60 days of the issuance of the patent.

The Commissioner is authorized to charge our deposit account 50-2003 the sum of $200 for this request in accordance with 37 C.F.R. § 1.18(e). However, because Applicant believes that this request is necessitated because of an error on behalf of the U.S. Patent and Trademark Office in making the adjustment to the patent term, that Applicant should be refunded this fee if this request is granted.

08/04/2006 CNGUYEN1 00000069 502003 10064723
01 FC:1455 200.00 DA

STATEMENT OF FACTS INVOLVED

The correct patent term adjustment for this patent should be 405 days. The Issue Notification determined that the patent term adjustment is 319 days.

This application was filed on January 11, 2002, under the provision of § 371 of 35 U.S.C. based on U.S. Patent No. 6,446,302 filed June 13, 2000, and claimed the benefit of U.S. Serial No. 60/139,127, filed June 14, 1999. The U.S. Patent and Trademark Office held that the above-identified application complied with all 35 U.S.C. requirements as of February 5, 2002. See Exhibit A attached hereto.

A first Office Action in this application was not mailed until November 17, 2004, 405 days after 14 months following the filing date of this application. A copy of the first Office Action is attached hereto as Exhibit B.

Applicant filed a timely Response to this Office Action on February 16, 2005, a copy of this Response is attached hereto as exhibit C.

On May 17, 2005, a Final Office Action was mailed. A copy of this Final Office Action is attached hereto as exhibit D.

Applicant filed a timely Response to this Office Action on July 15, 2005, a copy of this Response is attached hereto as exhibit E.

On August 15, 2005, a Second Non Final Office Action was mailed. A copy of this Office Action is attached hereto as exhibit F.

Applicant filed a timely Response to this Office Action on October 21, 2005, a copy of this Response is attached hereto as exhibit G.

On January 23, 2006, a Notice of Allowance, a Determination of Patent Term Adjustment, and a Notice of Allowability were mailed to Applicant. A copy of these documents is attached hereto as Exhibit H. In the Determination of Patent Term Adjustment, the Patent and Trademark Office correctly determined that the patent term adjustment is 405 days.

Applicant timely paid the issue fee on April 24, 2006. A copy of Applicant's Fees Transmittal which was filed on April 24, 2004, is attached hereto as Exhibit I. A copy of the

Issue Fee Transmittal in an Auto Reply facsimile from the U.S. Patent and Trademark Office showing that the final fee was paid on April 24, 2006, is attached hereto as Exhibit J.

Applicant filed no further papers in the U.S. Patent and Trademark Office subsequent to the timely payment of the final issue fee. Applicant received an Issue Notification, mailed May 31, 2006, that the patent would issue on June 20, 2006, and that the patent term adjustment was 319 days. No explanation was given for the difference between the original determination and the later determination. A copy of this Issue Notification is attached hereto as Exhibit K. This determination with the Issue Notification was in error because any delay in issuance of this patent was not the fault of the Applicant and was the fault of the U.S. Patent and Trademark Office.

Upon review of the file in Private Pair Applicants' attorney found that a miscellaneous Response belonging to an unrelated Patent Application Serial No. **11/064,723**, was erroneously placed in our file Patent Application Serial No. **10/064,723**. This filing error was used to compute the new patent term adjustment of 319 days. A copy of this miscellaneous Response is attached as exhibit L.

In view of the foregoing, Applicant believes that he is entitled to the full 405 days of patent term adjustment and no deduction should be made because Applicant carried out his obligation to prosecute the application diligently within the law.

Restoration of the patent term adjustment of the 405 days is respectfully requested.

Respectfully submitted,

GARY A. KASPER ET AL.

Dated: 7-31-06 By: _____

John E. McGarry, Reg. No. 22,360
McGARRY BAIR PC
171 Monroe Avenue, NW, Suite 600
Grand Rapids, Michigan 49503
616-742-3500

EXHIBITS

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/064,723	08/09/2002	1744	956	71189-1423	20	32	2

CONFIRMATION NO. 4232

20915
MCGARRY BAIR LLP
171 MONROE AVENUE
SUITE 600
GRAND RAPIDS, MI 49503

FILING RECEIPT

OC000000008664205

Date Mailed: 08/22/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

Gary A. Kasper, Grand Rapids, MI;
Allen W. Scott, Grand Rapids, MI;
Phong Hoang Tran, Caledonia, MI;
David E. McDowell, Grand Rapids, MI;
Gary L. Smith, Belding, MI;

Domestic Priority data as claimed by applicant

THIS APPLN CLAIMS BENEFIT OF 60/346,575 01/07/2002
AND IS A CIP OF 09/593,126 06/13/2000
AND CLAIMS BENEFIT OF 60/139,127 06/14/1999

Foreign Applications

If Required, Foreign Filing License Granted 08/21/2002

Projected Publication Date: 11/28/2002

Non-Publication Request: No

Early Publication Request: No

Title

Extraction cleaner with power drive

Preliminary Class

015

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,723	08/09/2002	Gary A. Kasper	71189-1423	4232

20915 7590 11/17/2004

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EXAMINER	
SNIDER, THERESA T	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 11/17/2004

Response due
Feb. 17, 2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/064,723	KASPER ET AL.	
	Examiner	Art Unit	
	Theresa T. Snider	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8,10-15,22-25 and 27-32* is/are rejected.

7)☒ Claim(s) *3,9,16-21 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 August 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/9/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Exemplary of such:

Claim 6, lien 2, 'mechanism' should be deleted.

Claim 8, line 2, 'a' should be replaced with 'the'.

Claim 10, line 2, 'one radial surface' should be replaced with 'one of the radial surfaces'.

Claim 27, line 3, 'solution' should be replaced with 'fluid';

Line 4, 'solution' should be replaced with 'fluid supply'.

Claim 29, line 2, 'end' should be inserted after 'upper';

Line 3, 'a' should be replaced with 'the'.

Claim 32, line 9, 'the dispensing' should be replaced with 'a dispensing';

Line 19, 'nozzle' should be inserted after 'suction'.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-2, 4, 13-14, 22-23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted State of the Prior Art as set forth in the preamble Jepson claim(hereafter ASPA) in view of Ripple.

ASPA discloses a similar cleaning apparatus however fails to disclose a traction driver mounted to the base.

Ripple discloses a surface cleaning apparatus having a traction driver mounted to the base of a housing for movement along a surface to be cleaned (fig. 1, #6, col. 6, lines 69-72). Ripple discloses a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface (col. 3, lines 12-20). It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Ripple in ASPA to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

With respect to claim 2, Ripple discloses the power drive assembly including a drive motor coupled to the traction driver and a drive actuator on the handle (col. 3, lines 12-20, claim 4).

With respect to claim 4, Ripple discloses an electric motor and a transmission assembly (col. 3, lines 12-20).

With respect to claim 13, Ripple discloses a unidirectional drive motor and a reversible transmission assembly (col. 4, lines 8-36).

With respect to claim 14, Ripple discloses a belt between the transmission assembly and the driver (col. 3, line 15).

With respect to claim 22, Ripple discloses a drive actuator on the handle (claim 4).

With respect to claim 23, Ripple discloses the actuator adapted to control forward and reverse movement of the base (col. 1, lines 40-46).

With respect to claim 31, Ripple discloses the traction driver being one of at least two wheels to support the base (fig. 1, #6).

11. Claims 1-2, 4-6, 13-14, 22-23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted State of the Prior Art as set forth in the preamble Jepson claim(hereafter ASPA) in view of Meyer et al.('740)

ASPA discloses a similar cleaning apparatus however fails to disclose a traction driver mounted to the base.

Meyer et al.('740) discloses a surface cleaning apparatus having a traction driver mounted to the base of a housing for movement along a surface to be cleaned (fig. 1, #16). Meyer et al.('740) discloses a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface (col. 3, lines 18-23). It would have been obvious to one of ordinary skill in the art to provide the

traction driver and power drive assembly of Meyer et al.('740) in ASPA to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

With respect to claim 2, Meyer et al.('740) discloses the power drive assembly including a drive motor coupled to the traction driver and a drive actuator on the handle (col. 3, lines 18-23, col. 6, line 66-col. 7, line 25).

With respect to claim 4, Meyer et al.('740) discloses an electric motor and a transmission assembly (col. 3, lines 18-23).

With respect to claim 5, Meyer et al.('740) discloses two drive trains, one for each direction and a clutch moveable between the drive trains (col. 7, lines 2-25).

With respect to claim 6, Meyer et al.('740) discloses the drive actuator connected to the clutch (col. 7, lines 18-21).

With respect to claim 13, Meyer et al.('740) discloses a unidirectional drive motor and a reversible transmission assembly (col. 6, line 66-col. 7, line 25).

With respect to claim 14, Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

With respect to claim 22, Meyer et al.('740) discloses a drive actuator on the handle (claim 6).

With respect to claim 23, Meyer et al.('740) discloses the actuator adapted to control forward and reverse movement of the base (claim 6).

With respect to claim 31, Meyer et al.('740) discloses the traction driver being one of at least two wheels to support the base (fig. 1, #16).

12. Claims 7-8, 15, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Meyer et al.('740) as applied to claim 7 above, and further in view of Martin et al..

ASPA in view of Meyer et al.('740) discloses a similar cleaning apparatus however fails to disclose the drive actuator being a handle grip or the inclusion of a belt tensioner.

Martin et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 4, lines 11 and 23-36). It would have been obvious to one of ordinary skill in the art to provide the actuator of Martin et al. in ASPA in view of Meyer et al.('740) to allow for directing of the apparatus over a surface with the handle without accidentally changing direction.

With respect to claim 8, Martin et al. discloses a cable connected between the grip and the clutch (fig. 2, #200).

With respect to claim 15, Martin et al. disclose the use of a belt tensioner assembly to maintain tension in a belt (col. 5, lines 29-33). It would have been obvious to one of ordinary skill in the art to provide the tensioner of Martin et al. on the drive belt, as well as on the agitator belt, to ensure the belt is in proper tension for the most effective operation.

With respect to claims 25 and 28, Martin et al. discloses the drive actuator biased to a neutral position and having a lock (col. 8, lines 6-45).

13. Claims 7-8, 15, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Ripple as applied to claim 7 above, and further in view of Martin et al..

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose the drive actuator being a handle grip or the inclusion of a belt tensioner.

Martin et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 4, lines 11 and 23-36). It would have been obvious to one of ordinary skill in the art to provide the actuator of Martin et al. in ASPA in view of Ripple to allow for directing of the apparatus over a surface with the handle without accidentally changing direction of the driver.

With respect to claim 8, Martin et al. discloses a cable connected between the grip and the clutch (fig. 2, #200).

With respect to claim 15, Martin et al. disclose the use of a belt tensioner assembly to maintain tension in a belt (col. 5, lines 29-33). It would have been obvious to one of ordinary skill in the art to provide the tensioner of Martin et al. on the drive belt, as well as on the agitator belt, to ensure the belt is in proper tension for the most effective operation.

With respect to claims 25 and 28, Martin et al. discloses the drive actuator biased to a neutral position and having a lock (col. 8, lines 6-45).

14. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Ripple as applied to claim 1 above, and further in view of Louis et al..

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose an air drive turbine motor.

Louis et al. discloses a cleaning apparatus with an air drive turbine motor for driving movement of a device (col. 5, lines 51-53). It would have been obvious to one of ordinary skill in the art to provide the turbine motor of Louis et al. in ASPA in view of Ripple to allow for the most effective operation.

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Meyer et al.('740) as applied to claim 1 above, and further in view of Louis et al..

ASPA in view of Meyer et al.('740) discloses a similar cleaning apparatus however fails to disclose an air drive turbine motor.

Louis et al. discloses a cleaning apparatus with an air drive turbine motor for driving movement of a device (col. 5, lines 51-53). It would have been obvious to one of ordinary skill in the art to provide the turbine motor of Louis et al. in ASPA in view of Meyer et al.('740) to allow for the most effective operation.

16. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Ripple as applied to claim 1 above, and further in view of Barnhart.

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose a carry handle affixed to the handle.

Barnhart discloses a cleaning apparatus with an upright handle and a carry handle on the handle (fig. 1, unnumbered region at lower end of handle). It would have been obvious to one of ordinary skill in the art to provide the carry handle of Barnhart in ASPA in view

of Ripple to allow having better positioning to carry the apparatus from one place to another without having to lift by the gripping region.

17. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Meyer et al.('740) as applied to claim 1 above, and further in view of Barnhart.

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose a carry handle affixed to the handle.

Barnhart discloses a cleaning apparatus with an upright handle and a carry handle on the handle (fig. 1, unnumbered region at lower end of handle). It would have been obvious to one of ordinary skill in the art to provide the carry handle of Barnhart in ASPA in view of Ripple to allow having better positioning to carry the apparatus from one place to another without having to lift by the gripping region.

18. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Louis et al. in view of Meyer et al.('740) and Martin et al..

Louis et al. discloses a similar cleaning apparatus however fails to disclose a traction driver or grip actuator.

Louis et al. discloses a housing including a base and an upright handle (fig. 1, #2, 4).

Louis et al. discloses at least two wheels mounted to the base (fig. 1, unnumbered element to left of #150).

Louis et al. discloses a liquid dispensing system (col. 6, lines 42-60).

Louis et al. discloses a fluid recovery system (col. 4, line 64-col. 5, line 9).

Louis et al. discloses a vacuum source (col. 4, lines 38-41).

Meyer et al.('740) discloses a surface cleaning apparatus having a drive motor connected between a transmission assembly and one of the wheels (fig. 1, #16, col. 3, lines 18-23).

It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Meyer et al.('740) in ASPA to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

Meyer et al.('740) discloses two drive trains, one for each direction and a clutch moveable between the drive trains (col. 7, lines 2-25).

Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

Martin et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 4, lines 11 and 23-36). It would have been obvious to one of ordinary skill in the art to provide the actuator of Martin et al. in ASPA in view of Meyer et al.(740) to allow for directing of the apparatus over a surface with the handle without accidentally changing direction of the driver.

Martin et al. discloses a link connected between the grip and the clutch (fig. 2, #200).

Allowable Subject Matter

19. Claims 3, 9, 16-21 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. Claims 10-11, 27 and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Theresa T. Snider
Primary Examiner
Art Unit 1744

11/15/2004

SAH #2 9-4-02

Electronic Information Disclosure Statement

EXTRACTION CLEANER WITH POWER DRIVE

Application:
Confirmation: 4232
Applicant(s): Gary Kasper
Docket Number: 71189-1423
Group Art Unit: 1744
Examiner: Snidor

search string: (4196492 or 3402420 or 5064010 or 5987696 or 6176940 or 4167799 or 5285550 or 4347643 or 4249281 or 4434865 or 4766640 or 5797163 or 4754520 or 5261141 or 1465285 or 2950772 or 4615071 or 4513469 or 3061858 or 3220043 or 4342369 or 3854164 or 4845803 or 3618687 or 3938216 or 6061869 or 5504971 or 4624027 or 6282747 or 6108862 or 5339916 or 5406674 or 5335740 or 5187832 or 5115537 or 5323483 or 5608944 or 5613261 or 5815884 or 6167587 or 6055702 or 5937475 or 5867861 or 5841259 or 5839156 or 5539953 or 5237720).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Citation No.	Patent Number	Date	Bar Code	Patentee	Class	Subclass
~~IIS~~	P01	4196492	1980-04-08		Johnson et al.	15	320
~~IIS~~	P02	3402420	1968-09-24		Schaeffer	—	
~~IIS~~	P03	5064010	1991-11-12		Masbruch et al.	180	6.5
~~IIS~~	P04	5987696	1999-11-23		Wang	15	319
~~IIS~~	P05	6176940	2001-01-23		Wang	134	21
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Signature

Examiner Name	Date
S. Snider	11/15/04

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	Examiner Theresa T. Snider	Art Unit 1744	Page 1 of 1

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AMENDMENT AND FEE TRANSMITTAL LETTER Applicant(s): Gary A. Kasper et al.			Docket No. 71189-1423
Serial No. 10/064,723	**Filing Date** 08/09/	**Examiner** Theresa T. Snider	**Group Art Unit** 1744

Invention:

Extraction Cleaner with Power Drive

TO THE COMMISSIONER FOR PATENTS

Transmitted herewith is an amendment in the above-identified application.

The fee has been calculated as shown below.

CLAIMS AS AMENDED

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	49	32 =	17	x $50	$850
INDEP. CLAIMS	8	3 =	5	x $200	$1000
			TOTAL ADDITIONAL FEE FOR THIS AMENDMENT		$1850

☐ No additional fee is required for amendment.

☐ Applicant claims small entity status.

☒ Please charge Deposit Account No. 50-2003 in the amount of $1850. A duplicate copy of this sheet is enclosed.

☐ A check in the amount of $ to cover the filing fee is enclosed.

☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-2003. A duplicate copy of this sheet is enclosed.

- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
- ☒ Any patent application processing fees under 37 C.F.R. 1.17.

Dated: February 16, 2005

John E. McGarry, Reg. No. 22,360
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I certify that this document and fee is being transmitted via facsimile to the Patent and Trademark Office to Examiner T. Snider at (703) 872-9306.

Christine M. Judge

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Gary A. Kasper et al.	
For:	EXTRACTION CLEANER WITH POWER DRIVE	
Serial No.:	10/064,723	Examiner: Theresa T. Snider
Filed:	08/09/02	Group Art Unit: 1744
Atty. Docket:	71189-1423	Confirmation No: 4232

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

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Sir:

AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the office action mailed November 17, 2004, kindly amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims appear in the complete listing of claims which beings on page 7 of this paper.

Amendments to the Drawings being on page 22 of this paper.

Remarks/Arguments begin on page 23 of this paper.

Amendments to the Specification

Please amend paragraph [Cross Reference to Related Applications], [0004], [0043], [0047], [0050], [0053], [0057], [0062], [0066], [0069], [0070] as shown below:

This claims the benefit of U.S. provisional patent application Serial No. 60/346,575, filed January 7, 2002, entitled EXTRACTION CLEANER WITH POWER DRIVE, and is a continuation-in-part of U.S. patent application Serial No. 09/593,126, filed June 13, 2000, entitled EXTRACTION CLEANING MACHINE WITH CLEANING CONTROL, now U.S. Patent No. 6,446,302, which claims the benefit of U.S. Provisional Patent Application Serial No. 60/139,127, filed June 14, 1999.

[0004] Upright extraction cleaners generally tend to be larger and heavier than upright vacuum cleaners, particularly when in use and the solution dispensing system is charged with a cleaning solution for application to a surface. Upright extraction cleaners are also known to have an optimal operating speed for dispensing and, particularly, extracting cleaning solution from a surface being cleaned, as disclosed in U.S. patent application Serial No. 09/593,126, filed June 13, 2000, and entitled EXTRACTION CLEANING MACHINE WITH CLEANING CONTROL, now U.S. Patent No. 6,446,302. A power drive system can be used in conjunction with the disclosed cleaning control system, although upright extraction cleaners having a pivotally mounted upright handle are not known to be equipped with a power drive system.

[0043] Referring to FIGS. 1-4, the upright extraction cleaning machine comprises a base housing 102 and an upright handle assembly 104. The upright handle assembly 104 is pivotally mounted to the base housing 102 and comprises an upper portion 106 and a lower portion 108. The upper portion 106 is formed of a front shell 900 and a rear shell 950 and includes a handle grip 110 and a solution trigger assembly 112. The lower handle portion is formed of a front shell 122 and a rear shell 124. The handle upper portion 106 is slidably connected to the handle lower portion 108 through a telescoping connection and a sliding block assembly 130 located in the handle lower portion 108. The front shell 122 and rear shell 124 define side extension cavity 118 ~~cavity~~ for enclosing internal components including the power drive elements. A carrying handle 902 is

attached to the lower portion 108 front shell 122 by two screws or other suitable fastening method.

[0047] Referring to FIGS 3, 4, and 6, the flexible belt 160 is a timing belt is driven by a belt drive gear 184 and that drives a wheel sprocket 364 on a wheel 116. The wheel sprocket 364 is secured to and rotates with the wheel 116 on axle 702, which is freely rotatable within a bearing in a lower end of the lower handle portion 108. Axial motion of the axle 702 is restricted by a snap ring 704 that fits in a groove on an end of the axle. The motor/transmission assembly 150 is linked to the sliding block assembly 130 by a bar 132, secured at a lower end portion to an end of an actuation lever 152, which is pivotally mounted to the housing of the motor/transmission assembly 150 through pin 153. The lever 152 is attached to a clutch mechanism within the motor/transmission 150 through a clutch pin 157 as will be described in more detail hereinafter. As the sliding block assembly 130 reciprocallyreciprocates moves longitudinally relative to the lower portion 108, the bar 132 moves the end of the actuation lever 152 vertically a corresponding distance, thereby pivoting the lever about pin 153 to move the clutch pin 157 laterally. In so doing, the transmission changes the direction of rotation of belt drive gear 184, depending on the direction of movement of the bar 132.

[0050] The first drive shaft 166 rotatably mounts a first drive gear 172 and a second drive gear 176 in axial alignment on drive shaft 166. Both drive gears 172, 176 are generally circular and comprise outer circumferential gear teeth. A drive spindle assembly 168 is keyed to the drive shaft 166 between the first drive gear 172 and the second drive gear 176 in axial alignment therewith. First drive gear 172 has a first clutch plate 162 mounted on a face adjacent to the drive spindle 168. Second drive gear 176 has a second clutch plate 164 on a face adjacent to the drive spindle 168. Drive spindle assembly 168 includes a clutch block 192, a yoke 194 and friction clutch material 167. The clutch block 192 is keyed to and rotates with the drive shaft 166, but can slide laterally a predetermined distance along the drive shaft 166 between the clutch plates 162 and 164. The yoke 194 is U-shaped and the legs thereof span the outside diameter of the clutch block 192. The legs of the yoke incorporate guides 196 that are received in an annular

groove in the clutch block 192. The bite portion of the yoke 194 is pinned to the actuator lever 152 through pin 157 (Fig. 4) and is pinned to the transmission housing 151 at an end portion of the legs. The mid-portion of the legs are laterally movable with respect to the transmission housing a relatively short distance. Lateral movement of the bite portion of the yoke 194 relative to the drive shaft 166 results in a corresponding movement of the clutch block 192 through the guides 196. The friction clutch material 167 is mounted on the surfaces of the clutch block 192 facing the secondary drive gears 172, 176.

[0053] The second drive gear 176 is intermeshed with an idler gear 178 that is mounted for rotation on an idler shaft 186. Idler shaft 186 is mounted on the transmission housing 151. Idler~~Intermediate~~ gear 178 is intermeshed with a third drive gear 180 fixedly mounted on the second drive shaft 182. When drive spindle 168 presses the clutch block 192 against the second clutch plate 164, second drive gear 176 drives idler gear 178 which 178 that in turn drives the third gear 180 and the second drive shaft 182 in a second direction. The drive force transferred to the at least one wheel of the extraction cleaner is in a direction opposite to the direction resulting from forcing the clutch block 192 against the second clutch plate 164. The drive wheel is thus selectively propelled in one of two directions, dependent upon the direction of the force applied on actuation bar 152 and the direction of movement of the drive spindle 168 toward first clutch plate 162 or second clutch plate 164.

[0057] Referring now to FIGS. 2, 3, and 4, a drive actuator 136 comprises ~~a~~ the sliding connection between the upper portion 106 and the lower portion 108 of the upright handle 104. The upper portion 106 slides into an opening at a first end 500 of the lower portion 108 to form the upright handle 104. A bearing sleeve 502 is located at a receiving end of the lower portion 108 rear shell 124 and functions to reduce friction and wear created as the upper portion 106 slides relative to the lower portion 108. A sliding block assembly 130 is located within positioning ribs formed in the rear shell 124 of the lower portion 108. The rear shell 950 of the upper portion 106 extends a sufficient distance to overlap a rearward surface of the block assembly 130. The block assembly 130 is fixedly attached to the upper portion 106 by screws or

other suitable fasteners. The block assembly 130 further comprises a block 504 that houses ~~a~~ the solution valve 170 and ~~a~~ the solution valve spring 506. A pair of spring posts 510 is integrally formed with the block 504 on opposite sides thereof and each post 510 is slidably mounted on a rib 514 of the rear shell 124. A coil spring 508 is mounted on each of the spring posts 510. Central portions of the coil springs 508 are retained by the ribs 514 to return block 504 to a neutral position in the absence of an external force by the user between the upper and lower portions 106, 108 of the handle assembly 104. A top surface 512 of the block 504 registers with the lower end 910 of the upper portion 106.

[0062] A third embodiment of a power drive assembly 350 for an extraction cleaner is shown in FIG. 10. In this embodiment, the drive motor 154 comprises a reversible DC motor 352 driving a transmission assembly 155 comprising a pinion gear 354 that is intermeshed with a secondary gear 356. The secondary gear 356 is fixedly attached to a drive shaft 358 for transferring rotational motion to a traction driver comprising a belt drive sprocket 360 and wheel 116. A transmission assembly 155 comprising a drive belt 362 then transfers rotational motion to a wheel sprocket 364 for rotating a drive wheel 368 of the extraction cleaner. The reversible DC motor 352 is electrically connected to a DC power source 370 by a power switch 372 and a double pole double throw switch 374. The double pole double throw switch 374 can take the form of a standard form three-position toggle on the handle portion 110 for thumb actuation by a user, or can be internally mounted in the handle portion 110 and arranged to be controlled by an activation device such as ~~a~~ the handle actuator sleeve 210.

[0066] Referring now to FIG. 14, a seventh embodiment of a power drive assembly 550 for an extraction cleaner comprises a suction source 552 of the extraction cleaner 100 fluidly connected to a drive motor 154 comprising a turbine motor 556 via a fluid conduit 554, as disclosed in commonly owned U.S. patent application Serial No. ~~60/213,122~~60/312,122, filed August 14, 2001. The turbine motor 556 rotates a turbine drive shaft 560 on which is mounted a pinion gear 562. The pinion gear 562 is intermeshed with a secondary gear or transmission 570 ~~which 570~~

that drives a belt drive sprocket 572. The belt drive sprocket 572 is engaged by a drive belt 574 for transferring rotational motion to a drive wheel of the extraction cleaner.

[0069] Referring to FIG. ~~19~~17, a track power drive assembly 850 is disclosed. The traction drive 134 comprises a track assembly 850 comprising a motor/transmission assembly 852 according to any of the previous embodiments operably connected to a drive belt 854. Drive belt 854 is reeved around a track sprocket 858, which is rotationally mounted on an underside of the extraction cleaner. At least one track 868 is mounted on a pair of track sprockets 858, and rides on a plurality of bearing track spindles 860.

[0070] Referring to FIG. 18, an eleventh embodiment of a power drive 1000 is described in commonly owned U.S. patent application Serial No. 09/593,126, filed June 13, 2000, and entitled EXTRACTION CLEANING MACHINE WITH CLEANING CONTROL, now U.S. Patent No. 6,446,302, and is incorporated by reference. The base housing 102 houses a drive motor 1002 that is connected to a source of electricity by an electrical cord. A motor compartment (not shown) within the base housing 102 ~~secures~~ securely mounts the motor in place. While the motor 1002 as shown drives only rear wheels 116, the motor 1002 can also drive an agitation brush (not shown) for agitating debris from the surface being cleaned, as well as an impeller fan (not shown) to create a vacuum source for drawing dirt, debris, and fluid from the surface being cleaned.

Amendments to the Claims

Please amend the claims as shown below in the complete listing of claims.

1. (Original) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing and including::

a liquid dispenser for applying liquid to the surface to be cleaned;

a fluid supply chamber for holding a supply of cleaning fluid;

a fluid supply conduit fluidly connected to the fluid supply chamber and to the liquid dispenser for supplying fluid to the dispenser;

a fluid recovery system mounted to the housing and including:

a recovery chamber for holding recovered fluid;

a suction nozzle;

a working air conduit extending between the recovery chamber and the suction nozzle; and

a vacuum source mounted to the housing and in fluid communication with the recovery chamber for generating a flow of working air from the suction nozzle through the working air conduit and to the recovery chamber to thereby draw dirty liquid from the surface to be cleaned through the suction nozzle and the working air conduit, and into the recovery chamber;

the improvement which comprises:

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned; and

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned.

2. (Original) The extraction surface cleaning apparatus of claim 1 wherein the power drive assembly comprises:

a drive motor selectively coupled to the traction driver for selectively driving the traction driver in at least one direction and a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver by the drive motor.

3. (Original) The extraction surface cleaning apparatus of claim 2 wherein the drive motor comprises a reversible electric motor.

4. (Original) The extraction surface cleaning apparatus of claim 2 wherein the drive motor comprises an electric motor and the power drive assembly further comprises a transmission assembly operably connected between the electric motor and the traction driver to selectively drive the traction driver in two directions.

5. (Original) The extraction surface cleaning apparatus of claim 4 wherein the transmission assembly comprises:

a first gear train selectively connected between the drive motor and the traction driver for driving the traction driver in a first direction;

a second gear train selectively connected between the drive motor and the traction driver for driving the traction driver in a second direction; and

a clutch moveable between the first and second gear train to alternately connect the first and second gear train between the drive motor and the traction driver.

6. (Currently Amended) The extraction surface cleaning apparatus of claim 5 wherein the drive actuator is operably connected to the clutch ~~mechanism~~.

7. (Original) The extraction surface cleaning apparatus according to claim 6 wherein the upright handle has an upper end portion and the drive actuator comprises a handle grip slidably mounted on the upper end portion of the handle for axial movement along the handle between forward and rearward positions.

8. (Currently Amended) The extraction surface cleaning apparatus of claim 7 wherein a cable is connected between ~~a~~ the handle grip and the clutch.

9. (Original) The extraction surface cleaning apparatus according to claim 4 wherein the transmission assembly comprises:

a flywheel mounted for rotation about a central axis having a pair of parallel radial surfaces;

the traction driver is non-rotatably mounted on a drive axle and the drive axle is mounted for rotation about an axis parallel and adjacent to one of the flywheel radial surfaces;

a drive wheel is axially shiftable and non rotatably mounted on the drive axle for rotation therewith, and the drive wheel has an outer circumferential surface that rolls along one of the radial surfaces of the fly wheel to transfer rotary motion of the fly wheel to rotary motion of the drive axle;

wherein shifting of the drive wheel along the drive axle changes the gear ratio between the fly wheel and the drive wheel.

10. (Currently Amended) The extraction surface cleaning apparatus of claim 9 wherein a projection of the drive axle onto the one of the radial surfaces of the flywheel defines a diametrical line across the flywheel and the drive wheel contact with the flywheel is along the

diametrical line, whereby axial shifting of the drive wheel along the drive axle changes the gear ratio and can also change the direction of rotation of the drive axle..

11. (Original) The extraction cleaning apparatus of claim 10 and further comprising a worm gear driven by the motor and wherein the flywheel has an outer circumferential gear edge that is driven by the worm gear.

12. (Original) The extraction surface cleaning apparatus of claim 1 wherein the power drive assembly includes an air drive turbine motor.

13. (Currently Amended) The extraction surface cleaning apparatus of claim 1 wherein the power drive assembly comprises a unidirectional electric drive motor and a reversible transmission assembly between the electric drive motor and the traction driver is adapted to selectively drive the traction driver in one of two directions.

14. (Original) The extraction surface cleaning apparatus of claim 13 wherein the power drive assembly further includes a belt between the transmission assembly and the traction driver.

15. (Original) The extraction surface cleaning apparatus of claim 14 and further comprising a belt tensioner assembly mounted to the housing to maintain tension on the belt.

16. (Original) The extraction surface cleaning apparatus of claim 15 wherein the belt tensioner assembly comprises a plate slidably mounted to the housing, a pair of wheels rotatably mounted on the plate and the belt is weaved between the wheels so that proper tension is maintained when the belt is driven in either direction.

17. (Original) The extraction cleaning apparatus of claim 1 wherein the power drive assembly comprises a drive motor mounted on the housing and a flexible cable in driving relationship at one end with the motor and in driving relationship at the other end with the traction driver.

18. (Original) The extraction cleaning apparatus of claim 1 wherein the power drive

assembly comprises:

a wheel sprocket non-rotatably connected to the traction driver for movement therewith, and;

a drive motor mounted on the housing in driving relationship with the wheel sprocket.

19. (Original) The extraction surface cleaning apparatus according to claim 18 wherein the drive motor is mounted to the handle and further comprising a belt operably connected to the drive motor and the wheel sprocket for driving the traction driver.

20. (Original) The extraction surface cleaning apparatus according to claim 1 wherein the traction driver comprises a drive brush mounted for rotation about a horizontal axis on the base; and the power drive assembly further comprises:

a sprocket non-rotatably mounted to the drive brush;

a drive motor mounted to the housing; and

a belt drive between the motor and the wheel sprocket for driving the drive brush;

wherein rotation of the drive brush results in movement of the base across the surface to be cleaned.

21. (Original) The extraction surface cleaning apparatus of claim 1 wherein the traction driver comprises:

a track assembly including:

a pair of track sprockets mounted on the base for rotation about parallel, horizontally spaced axes; and

at least one track belt reeved around the track sprocket and in contact with a surface to be cleaned; and

a drive motor mounted on the housing and operably connected to one of the track sprockets for selectively driving the same.

22. (Original) The extraction surface cleaning apparatus of claim 1 wherein the power drive assembly comprises a drive actuator on the handle for selectively controlling the movement of the base over the surface to be cleaned.

23. (Original) The extraction surface cleaning apparatus of claim 22 wherein the drive actuator is adapted to control the forward and reverse movement of the base over the surface to be cleaned.

24. (Original) The extraction surface cleaning apparatus of claim 22 wherein the upright handle has an upper end portion and the drive actuator comprises a handle grip slidably mounted on the upper end portion of the handle for axial movement along the handle between forward and rearward positions.

25. (Currently Amended) The extraction surface cleaning apparatus of claim 24 wherein the drive actuator is biased to a neutral position between the forward and rearward positions for disablement of the power drive assembly when the handle is in a reclining position.

26. (Original) The extraction surface cleaning apparatus of claim 25 wherein the drive actuator further comprises a mounting block slidable on the handle and further comprising a solution valve mechanism in the fluid supply conduit mounted to the sliding block for movement therewith.

27. (Currently Amended) The extraction surface cleaning apparatus of claim 26 and further comprising a solution valve actuator mounted to the handle grip and connected to the solution valve mechanism to control the flow of cleaning ~~solution~~ fluid through the solution valve mechanism to the liquid dispenser from the ~~solution~~ fluid supply chamber.

28. (Currently Amended) The extraction surface cleaning apparatus of claim 25 and further comprising a lock for selectively locking the handle grip in the neutral position when the handle is in a reclining position.

29. (Currently Amended) The extraction surface cleaning apparatus of claim 28 wherein the lock comprises an aperture in the handle grip and an aperture in the upper end portion of the handle and apertures aligned with each other when the handle grip is in thea neutral position; and

a pin selectively moveable between a locked position wherein the pin is positioned within both of the apertures and an unlocked position wherein the pin is retracted from at least one of the two apertures.

30. (Original) The extraction surface cleaning apparatus of claim 1 and further comprising a carry handle affixed to the upright handle.

31. (Original) The extraction surface cleaning apparatus of claim 1 and further comprising at least two wheels mounted to the base for supporting the housing for movement over the surface to be cleaned and wherein the traction driver comprises at least one of the at least two wheels.

32. (Currently Amended) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

at least two wheels mounted to the base for supporting the housing for movement along the surface to be cleaned;

a liquid dispensing system mounted to the housing and including:

a liquid dispenser for applying liquid to the surface to be cleaned;

a fluid supply chamber for holding a supply of cleaning fluid;

a fluid supply conduit fluidly connected to the fluid supply chamber and to the liquid dispens~~ing nozzle~~er for supplying fluid to the liquid dispenser~~ing nozzle~~;

a fluid recovery system mounted to the housing and including:

a recovery chamber for holding recovered fluid;

a suction nozzle;

a working air conduit extending between the recovery chamber and the suction nozzle; and

a vacuum source mounted to the housing and in fluid communication with the recovery chamber for generating a flow of working air from the suction nozzle through the working air conduit and through the recovery chamber to thereby draw dirty liquid from the surface to be cleaned through the suction nozzle and the working air conduit, and into the recovery chamber;

a drive motor comprising a unidirectional electric motor mounted on the housing;

a transmission assembly operably connected between the drive motor and at least one of the wheels for selectively connecting the drive motor with the at least one wheel, the transmission assembly including a first gear train selectively connected between the drive motor and the at least one wheel for driving the base in a forward direction;

a second gear train selectively connected between the drive motor and the at least one wheel for driving the base in a reverse direction;

a clutch mechanism moveable between the first and second gear trains to alternately connect the first and second gear trains between the drive motor and the at least one wheel;

a belt drive connecting the transmission assembly to the at least one wheel, the belt drive including a tension adjuster for maintaining a predetermined tension on the belt when the base is driven in the front and the rear directions;

the handle having a grip mounted to an upper end thereof, the grip being slidably mounted on the upper end of the handle between an extended position, a neutral position and a retracted position;

a drive actuator mounted on the grip portion and moveable therewith;

a link between the grip and the clutch to move the clutch between the first gear train and the second gear train and to a neutral position between the two gear trains.

33. (New) The extraction surface cleaning apparatus according to claim 32 and further comprising a direct connection between the drive motor and the transmission assembly.

34. (New) The extraction surface cleaning apparatus according to claim 33 wherein the drive motor and the transmission assembly are both mounted to the upright handle.

35. (New) The extraction surface cleaning apparatus according to claim 32 wherein the drive motor and the transmission assembly are both mounted to the upright handle.

36. (New) The extraction surface cleaning apparatus according to claim 32 wherein the vacuum source includes a vacuum motor and the vacuum motor and the drive motor are independent of each other.

37. (New) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned; and

wherein the vacuum motor and the power drive assembly are independent of each other.

38. (New) The extraction surface cleaning apparatus according to claim 37 wherein at least a portion of the power drive assembly is mounted to the upright handle.

39. (New) The extraction surface cleaning apparatus according to claim 38 wherein the power drive assembly comprises a drive motor and a transmission assembly and further comprising a direct connection between the drive motor and the transmission assembly.

40. (New) The extraction surface cleaning apparatus according to claim 37 wherein the power drive assembly comprises a drive motor and a transmission assembly and further comprising a direct connection between the drive motor and the transmission assembly.

41. (New) The extraction surface cleaning apparatus according to claim 37 wherein the fluid recovery system includes a recovery tank and the recovery tank is mounted in the base.

42. (New) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a drive motor, a transmission assembly and a direct connection between the drive motor and the transmission assembly, all mounted to the housing, wherein the transmission is connected to the traction driver for selectively propelling the base over the surface to be cleaned.

43. (New) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward, neutral and rearward positions;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned in a forward and reverse direction;

a connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base assembly in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively; and

a lock mounted on the handle and accessible to the operator for selectively locking the handle grip in the neutral position.

44. (New) The extraction surface cleaning apparatus of claim 43 wherein the lock includes a rotatable knob.

45. (New) The extraction surface cleaning apparatus of claim 43 wherein the handle grip is biased to the neutral position for disablement of the power drive assembly.

46. (New) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward, neutral and rearward positions;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned in a forward and reverse direction;

a rigid connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base assembly in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively.

47. (New) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned; and

a flywheel mounted for rotation about a central axis having a radial surface;

the traction driver is non-rotatably mounted on a drive axle and the drive axle is mounted for rotation about an axis parallel and adjacent to the flywheel radial surface;

a drive wheel is axially shiftable and non rotatably mounted on the drive axle for rotation therewith, and the drive wheel has an outer circumferential surface that frictionally engages the radial surface of the fly wheel and is driven thereby to transfer rotary motion of the fly wheel to rotary motion of the drive axle;

wherein shifting of the drive wheel along the drive axle from one side of the radial surface to the another side changes the direction of rotation of the drive wheel.

48. (New) The extraction surface cleaning apparatus of claim 47 wherein radial surface has a recessed area between the sides of the radial surface and drive wheel is adapted to positioned in registry with the recessed area, out of contact with the radial surface to disconnect the drive between the flywheel and the drive wheel.

49. (New) An extraction surface cleaning apparatus having;

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward, neutral and rearward positions;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid, a liquid dispenser and a fluid supply conduit, including a solution valve, between the liquid fluid supply chamber and the liquid dispenser for selectively applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned in a forward and reverse direction;

a connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base assembly in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively;

wherein the connection between the handle grip and the power drive assembly includes a mounting block, slidable on the handle; and

the solution valve is mounted to the sliding block for movement therewith.

(New) 49. The extraction surface cleaning apparatus of claim 48 and further comprising a cleaning solution actuator mounted on the handle grip and connected to the solution valve for selectively opening the solution valve to control the supply of cleaning fluid to the liquid distributor.

Amendments to the Drawings

Please amend the drawings as follows:

The attached sheets of drawings include changes to FIGS. 2-5, 11, 16, and 18. These sheets replace the original sheets including FIGS. 2-5, 10, 11, 16, 17, and 18.

Attachment: Replacement Sheets
Annotated Sheets Showing Changes

REMARKS

By the present amendment, the specification, drawings, and claims have been amended to overcome formal matters set forth by the Examiner. In addition, new claims 33-49 have been added. The Examiner's thorough examination of the specification, drawings, and claims is much appreciated. Applicants' believe that all of the formal matters have been corrected. However, with respect to the Examiner's objection to page 12, paragraph 53, Applicants' do not understand the Examiner's objections. The sentence appears to be grammatically correct as written.

Thus, it is submitted that the amendments to the drawings and the specification overcome the Examiner's objections.

Claim Objections – 35 U.S.C. § 112

Claims 6-8, 10, 11, 27, 29, and 32 have been rejected under 35 U.S.C. § 112 second paragraph as being indefinite. Applicants believe that the amendments to the claims, which track the Examiner's helpful suggestions, obviate the rejection of the claims under 35 U.S.C. § 112.

Claim Objections – 35 U.S.C. § 103

Claims 1, 2, 4, 13, 14, 22, 23, and 31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted state of the prior art as set forth in the preamble Jepson claim (ASPA) in view of the Ripple U.S. Patent No. 2,814,063. This rejection is respectfully traversed. The Ripple '063 patent discloses a self-propelled vacuum cleaner wherein a handle is pivotally mounted to a base and the base contains an actuator which is coupled to the handle for driving a drive wheel in forward and reverse directions, depending on the force applied to the handle.

The combination of the ASPA in view of Ripple '063 is traversed. There is no basis for making the alleged combination. Simply because Ripple discloses a vacuum cleaner with a traction driver does not suggest that the Ripple traction driver can be used on an upright deep cleaning machine. There is no suggestion in ASPA or Ripple '063 which would warrant the combination. Simply picking and choosing elements from references and combining them to meet a claim construction does not satisfy the standards of 35 U.S.C. § 103. There must be some

suggestion for the combination. Alternatively, it must be within the skill of the art to make the combination. The Examiner has made no showing as to why it would be obvious to one of ordinary skill in the art to provide a traction driver and power drive assembly of Ripple in ASPA. The statement of reducing operator fatigue by providing for a self-propelled cleaning apparatus does not satisfy the standard. It is merely a conclusory statement that is drawn from the combination. But there is no desirability shown for powering an extraction cleaner. Extraction cleaning machines and vacuum cleaning machines are entirely different machines that operate mostly on different principles. It is therefore submitted that claims 1, 2, 4, 13, 14, 22, 23, and 31 are not obvious over the combination of ASPA in view of Ripple '063.

With respect to claims 2, 4, 22, and 23 the alleged combination of Ripple '063 and ASPA does not disclose a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver by the drive motor. There is no drive actuator on the Ripple '063 handle. The drive actuator is on the base and responds to movement of the handle.

With respect to claim 14, alleged combination of Ripple '063 and ASPA does not disclose a belt between a transmission assembly and the traction driver. The transmission assembly is directly connected to the traction driver in Ripple '063.

In view of the foregoing, it is submitted the claims 1, 2, 4, 13, 14, 22, 23, and 31 patentably define over any alleged combination of ASPA in view of Ripple '063.

Claims 1, 2, 4-6, 13, 14, 22, 23, and 31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of the Meyer et al. U.S. Patent No. 5,335,740. This rejection is respectfully traversed. The Meyer et al. '740 patent discloses a vacuum cleaner similar to the Ripple '063 patent with a somewhat different traction drive system.

The alleged combination of ASPA and Meyer et al. '740 is traversed. There is no basis for making the combination. There is no suggestion in the Meyer et al. '740 of the use of the Meyer et al. '740 traction drive system in an upright extraction machine. In this rejection, as in the previous rejection, the Examiner has merely selected various features from the Meyer et al. '740 patent and represented that it would have been obvious to use these features in an extraction cleaning machine. However, there is no suggestion or motivation for making the combination.

The statement of reducing operator fatigue is a conclusory statement and has no basis in fact in any of the references. It is therefore submitted that the rejected claims 1, 2, 4-6, 13, 14, 22, 23, and 31 patentably define over the alleged combination of ASPA in view of Meyer et al. '740.

With respect to claim 2, the alleged combination of ASPA and Meyer et al. '740 does not disclose a drive actuator on the handle operably connected to the drive motor for controlling selective driving of the traction driver by the drive motor. The drive actuator in Meyer et al. '740 is not on the handle but rather on the base. It is the movements of the Meyer et al. '740 handle which operates the drive actuator.

Claims 4-6 depend from claim 2 and are patentable for the same reasons that claim 2 is patentable over the alleged combination of ASPA and Meyer et al. '740.

With respect to claim 14, the Meyer et al. '740 patent does not disclose a belt between the transmission assembly and the traction driver. The belt in Meyer et al. '740 provides the primary drive from the motor 17 to a transmission that in turn drives the rear traction wheels. The belt does not extend between the transmission and the rear traction wheels.

With respect to claims 22 and 23, the Meyer et al. '740 patent does not disclose a drive actuator on the handle for selectively controlling the movement of the base over the surface to be cleaned. The Meyer et al. '740 drive actuator is on the base and not on the handle.

In view of the foregoing, is submitted that claims 1, 2, 4-6, 13, 14, 22, 23, and 31 are patentable over ASPA in view of Meyer et al. '740.

Claims 7, 8, 15, 24, 25, and 28 have been rejected under 35 U.S.C. § 103 as being unpatentable over ASPA in view of Meyer et al. '740 as applied to claim 7 above and further in view of the Martin et al. U.S. Patent 4,766,640. This rejection is respectfully traversed.

It is noted that the combination of ASPA in view of Meyer et al. '740 is not applied against claim 7 in the previous rejection but was applied against claim 6 from which claim 7 depends. In addition, ASPA in view of Meyer et al. '740 was applied against claims 13 and 14 from which claim 15 depends. Further, ASPA in view of Meyer et al. '740 was applied against claim 1 from which all of these claims depend. Applicants believe that the Examiner meant "as applied against claim 1" instead of "as applied against claim 7" and the rejection will be so treated.

The Martin et al. '640 patent relates to a self-propelled upright vacuum cleaner that has a cable connection between an axially moveable handle grip and a drive system that drives the wheels of the vacuum cleaner in a forward and reverse direction. Further, the Martin et al. '640 patent is cited to show a belt tensioner. However, the belt tensioner adjusts the tension in a belt between the vacuum motor and a brush.

The alleged combination of ASPA in view of Meyer et al. '740 and Martin et al. '640 is traversed. There is no basis for making the alleged combination.

The alleged combination of ASPA in view of Meyer et al. '740 has been discussed above and is believed to be equally applicable here. The Martin et al. '640 reference and the Meyer et al. '740 reference both disclose a powered vacuum cleaner, but that is the end of the comparison. The mechanisms for driving the vacuum cleaners as well as the transmissions and the operation of the transmissions of these two references are entirely different. The Examiner has provided no guidance as to how the Meyer et al. '740 reference could be modified by the teaching of the Martin et al. '640 patent. It is quite evident that the Examiner has merely lifted elements of the Martine et al. '640 patent and represented, without support, that these elements can be incorporated into the Meyer et al. '740 reference without discussing how the Meyer et al. '740 reference could be modified with the Martin et al. '640 teachings. The Meyer et al. '740 reference does not disclose a powered brush drive, but one can be presumed. The powered brush drive is likely to be disclosed by other references and is typically driven by the vacuum motor.

Thus, the alleged combination of Martin et al. '640 with Meyer et al. '740 would at best place a belt tensioner on the belt drive for the brush that may exist in the Meyer et al. '740 vacuum cleaner. It is not at all clear how the Martin et al. '640 cable drive could be used in the Meyer et al. '740 transmission.

Claims 7, 8, 15, 24, 25, and 28 distinguish over the alleged combination of ASPA in view of Meyer et al. '740 and Martin et al. '640 in the same fashion that claim 1 distinguishes over the alleged combination of ASPA in view of Meyer et al. '740. There is no suggestion of incorporating the Meyer et al. '740 and Martin et al. '640 drive systems in an extraction cleaning machine and the combination is inappropriate.

Claims 7 and 8 further distinguish over the alleged combination of ASPA, Meyer et al. '740 and Martin et al. '640 in calling for handle grips slidably mounted on the upper portion of the handle for axial movement along the handle between forward and reverse positions. Although the Martin et al. '640 reference discloses a handle grip slidably mounted on an upper portion of a handle for axial movement for controlling forward and rearward movement of the vacuum cleaner, it is believed that this element in combination with the Meyer et al. '740 reference does not meet the claims because there is no enabling teaching as to how the handle grip actuator of Martin et al. '640 can be incorporated into the Meyer et al. '740 drive actuator.

Claim 15 distinguishes over the alleged combination of ASPA, Meyer et al. '740, and Martin et al. '640 in calling for a belt tensioner to maintain tension on the belt between the transmission assembly and the traction driver. The alleged combination of these references would at best show a tensioner on a brush belt drive in the Meyer et al. '740 vacuum cleaner. It should be further pointed out that claim 15 depends from claim 14 and calls for a belt between a transmission assembly and a traction driver. Neither of the Meyer et al. '740 or the Martin et al. '640 references disclose this combination. Although both of these references use a belt drive, the belt drive is between the motor output and transmission and not between the transmission and the traction driver.

Claims 24 and 25 define over the alleged combination of ASPA in view of Meyer et al. '740 and Martin et al. '640 in the same fashion as claims 7 and 8 in that the alleged combination of references does not disclose a handle grip slidably mounted on the upper portion of the handle for axial movement along the handle between forward and rearward positions which is the subject matter of claims 24 and 25.

Claim 25 further distinguishes over the references in calling for the drive actuator to be biased to a neutral position between forward and rearward positions for disablement of the power drive assembly when the handle is in a reclining position. This concept is not disclosed in either of the references. The Martin et al. drive actuator is biased to a neutral position and has a neutral lock, but only when the handle is in the upright position.

Claim 28 distinguishes over the alleged combination of references because it depends from claim 25 and defines over the references in the same fashion as claim 25 and further calls

for a lock for selectively locking the handle grip in the neutral position when the handle is in a reclining position. This concept is not disclosed by the references.

Claims 7, 8, 15, 24, 25, and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of the Ripple '063 patent and Martin et al. '640. This rejection is respectfully traversed. The alleged combination of ASPA with Ripple '063 is untenable as discussed above with respect to the rejection of claim 1. Applicants reiterate their arguments made above with respect to the alleged combination of ASPA in view of Ripple '063.

The combination of ASPA, Ripple '063, and Martin et al. '640 is traversed. It is equally as inappropriate as the combination of ASPA, Meyer et al. '740, and Martin et al. '640 as discussed above. Applicants reiterate their arguments with respect to the combinability of ASPA, Meyer et al. '740, and Martin et al. '640 against the arguments of ASPA, Ripple '063, and Martin et al. '640.

With respect to the rejection of claims 7, 8, 15, 24, 25, and 28 over this combination of references, it is believed that Applicants' arguments above with respect to these same claims as to the rejection of ASPA in view of Meyer et al. '740 and Martin et al. '640 are equally applicable here. These arguments are incorporated herein by reference.

Claim 12 has been rejected as being unpatentable over ASPA in view of Ripple '063 and further in view of the Louis et al. U.S. Patent No. 5,983,442. This rejection is respectfully traversed. The alleged combination of ASPA in view of Ripple '063 and Louis et al. '442 is traversed. There is no basis for making this combination. The inappropriateness of the ASPA and Ripple references has been discussed above and is equally applicable here. Further, there is no suggestion as to how to incorporate the teaching of Louis et al. in the alleged combination of ASPA and Ripple '063. Thus, the combination of ASPA, Ripple '063, and Louis et al. '442 is untenable.

The Louis et al. '442 patent discloses an upright deep cleaner wherein an air drive turbine motor is used to drive brushes and a fluid pump. There is no suggestion in Louis et al. of using a turbine motor for driving the base of the upright deep cleaner in the Louis et al. '442 patent. Nor is there any suggestion as how the turbine motor would be used in the Ripple '063 patent or the alleged combination of Ripple '063 with ASPA.

The Examiner will appreciate that the Ripple '063 reference uses a vacuum motor to drive a transmission. The Louis et al. '442 patent has an electric motor to drive the vacuum source as well as to drive the brush. Incorporating the turbine motor of Louis et al. '442 patent into the Ripple '063 patent would render the Ripple '063 vacuum cleaner inoperative because there would be no suction source to drive the vacuum motor. The alleged combination of Louis et al. '442 and Ripple '063 would merely substitute the Louis et al. '442 turbine motor for the Ripple '063 vacuum motor. Alternatively, at best, the turbine motor would be added to the Ripple '063 reference in order to drive the brush. This alleged combination would not meet claim 12 which calls for a power drive assembly including an air turbine motor.

Claim 12 has also been rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of Meyer et al. '740 as applied to claim 1 above and further in view of Louis et al. '442. This rejection is respectfully traversed.

As indicated above, the Meyer et al. '740 and the Ripple '063 references appear to be commensurate in disclosure with respect to the claims of the present application. Thus, Applicants arguments with respect to the distinction of claim 12 over the alleged combination of ASPA in view of Ripple '063 and Louis et al. '442 are equally applicable against the alleged combination of ASPA, Meyer et al. '740, and Louis et al. '442 and are incorporated herein by reference.

Claim 30 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of Ripple '063 as applied to claim 1 or Meyer et al. '740 as applied against claim 1 and further in view of the Barnhart U.S. Patent No. Des. 152,182. These rejections are respectfully traversed.

The combination of ASPA in view of Ripple '063 or Meyer et al. '740 with the Barnhart '182 reference is traversed. There is no basis for making the alleged combination.

The Barnhart '182 patent discloses an upright vacuum cleaner which appears to have a grip for carrying the vacuum cleaner on a pivotal handle. There is no teaching incorporating the Barnhart handle structure into Ripple '063 in view of foregoing, it is submitted that claim 30 patentably distinguishes over either of Ripple '063 or Meyer et al. in view of ASPA and Barnhart '182.

Claim 32 has been rejected under 35 U.S.C. § 103 as being unpatentable over the Louis et al. '442 patent in view of the Meyer et al. '790 patent and the Martin et al. '640 patent. This rejection is respectfully traversed. The Louis et al. '442, Meyer et al. '740, and Martin et al. '640 patents have been discussed above. Although this precise combination of Louis et al. '442, Meyer et al. '740, and Martin et al. '640 was not made with respect to any of the other claims, this alleged combination is traversed for the same reasons as alleged combination of ASPA with either Meyer et al. '740 or Martin et al. '640.

The Louis et al. '442 patent appears to disclose nothing more than what is disclosed in the preamble to claim 1, otherwise known as ASPA. Thus, the alleged combination of Louis et al. '442 with Meyer et al. '740 or Martin et al. '640 is traversed for the same reasons as set forth above with respect to ASPA, Meyer et al. '740, and Martin et al. '640. The Examiner has merely picked elements from the references which appear to relate in some manner to the elements of the claims and merely alleged that it would be obvious to combine all of these elements into Applicants' claims. However, there is no teaching as to how these elements could be combined to reach Applicants' claimed invention. Simply pointing out that various features are found in prior art references does not meet the standard of 35 U.S.C. § 103 of obviousness. One must show a plausible connection between the two based on the teaching of the references not by conclusory statements as to what advantage would be gained if the combination were made. These conclusory statements are nothing more than a demonstration of classic hindsight argument.

However, even if the alleged combination were to be made, however untenably, it still would not reach Applicants' claimed invention as defined in claim 32. The alleged combination would simply provide the Meyer et al. suction drive system on the Louis et al. extraction machine, modified with the Martin et al. to provide a slidable handle grip with a cable connected to the Meyer et al. clutch actuator and would further provide a belt tensioner between the motor and the brush drive which one might infer from the Meyer et al. '740 reference. Applicants wish to point out that the turbine drive in the Louis et al. '442 patent does not have a belt drive between the turbine motor and the brushes. The drive appears to be a direct drive system.

Claim 32 distinguishes over the alleged combination in calling for a belt drive connecting the transmission assembly to at least one wheel and having a tension adjuster for maintaining a predetermined tension on the belt when the base is driven in the front and rear directions. Although Meyer et al. '740 discloses a belt between the transmission assembly and the motor, Meyer et al. '740 does not disclose a belt drive between the transmission and the wheels. However, Martin et al. '640 does disclose a belt drive between the transmission and the wheels as well as a belt drive between the motor and the transmission.

In spite of all of these machinations of elements that, which in some undisclosed way, must be combined to meet the claimed invention, there still is no disclosure of a tension adjuster to maintain a predetermined tension on the belt drive between the transmission assembly and the at least one wheel. Thus, claim 32 patentably distinguishes over the alleged combination of Louis et al. '442, Meyer et al. '740, and Martin et al. '640.

It is noted with appreciation that claims 3, 9, 16-21, and 26 have been indicated as allowable if rewritten in independent form and that claims 10, 11, 27, and 29 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 and written in independent form. In view of Applicants' position with respect to claim 1, from which all of these claims depend, these claims have not been rewritten in independent form although claims 10, 11, 27, and 29 are now believed to be free from any objections under 35 U.S.C. § 112.

Applicants have added new claims 37-48 to reflect in independent form some of the novel features which the Examiner has indicated as being allowable without rewriting the dependent claims in independent form. Claim 37, for example, calls for independent vacuum and drive motors in a power driven extractor. New claim 42 calls for a power driven extractor with a direct drive between the motor and the transmission, which is not found in any of the cited references. Newly added claim 43 calls for a power drive extractor with a lock on the handle accessible to the operator for selectively locking the handle in the neutral position. Claim 46 calls for a power driven extractor with a rigid connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base assembly in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively. Claim 47 calls for a power driven extractor with a flywheel

mounted for rotation about a central axis and a drive wheel axially shiftable and non rotatably mounted on a drive axle for rotation therewith, and wherein the drive wheel has an outer circumferential surface that frictionally engages the radial surface of the fly wheel and is driven thereby to transfer rotary motion of the fly wheel to rotary motion of the drive axle. Claim 49 calls for a power driven extractor with a connection between the handle grip and the power drive assembly the includes mounting block, slidable on the handle, and with a solution valve mounted to the sliding block for movement therewith. These concepts are not disclosed in any of the references.

In view of the foregoing remarks and amendments it is submitted that all of the claims in this application are in condition for allowance. Early notification of allowability is respectfully requested. If the Examiner does not believe that all of the claims are in condition for allowance, the courtesy of a telephone interview is respectfully requested.

Respectfully submitted,

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Dated: 2·16·05

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Appl. No. 10/064,723
Amdt. Dated Feb. 16, 2004
Reply to Office Act of Nov. 17, 2004
Annotated Sheet Showing Changes:

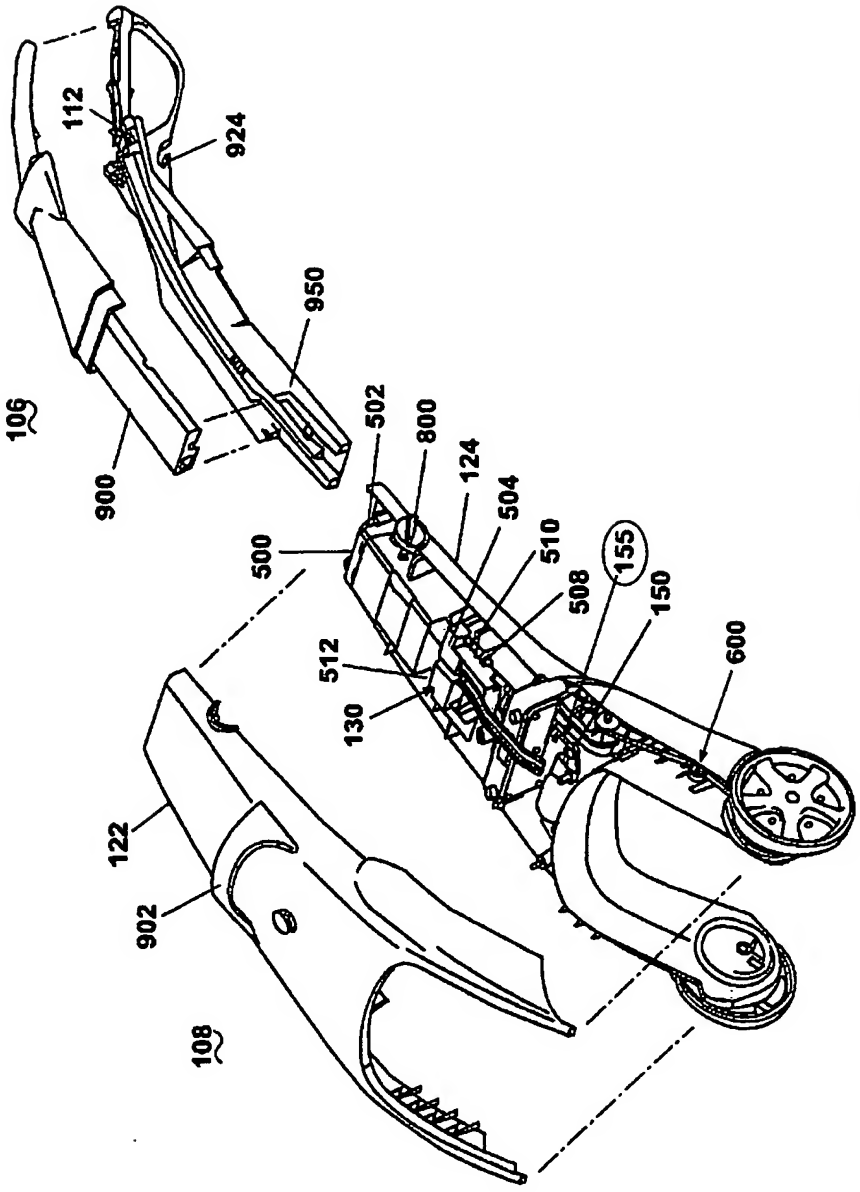

Fig. 2

Appl. No. 10/064,723
Amdt. Dated Feb. 16. 2004
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Annotated Sheet Showing Changes

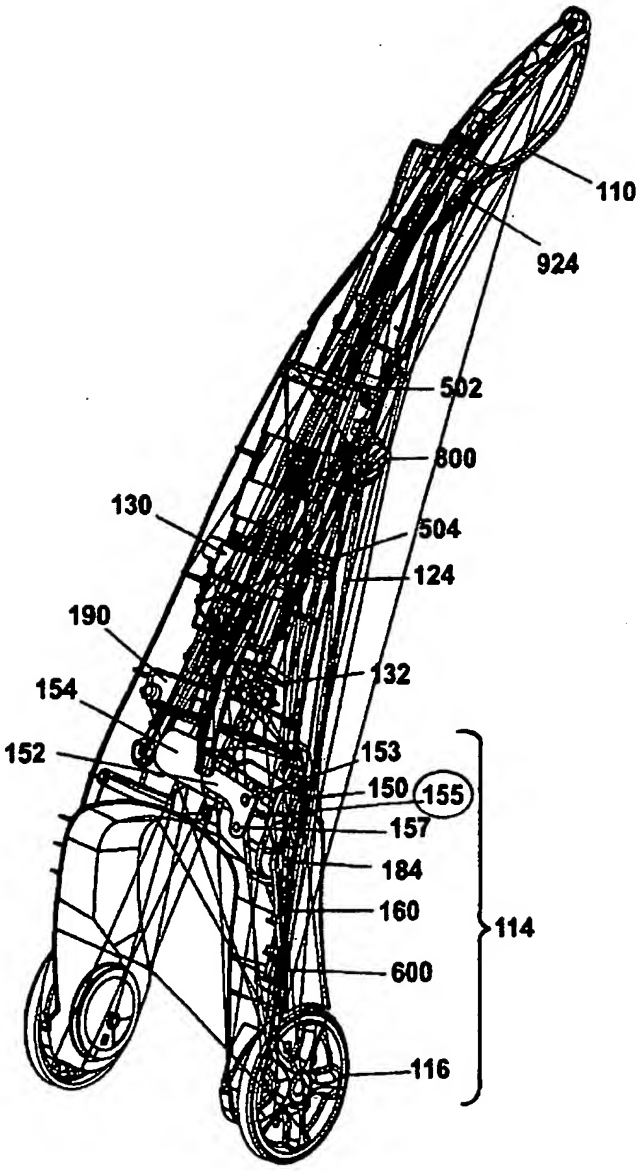

Fig. 3

Appl. No. 10/064,723
Amdt. Dated Feb. 16, 2004
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Annotated Sheet Showing Changes

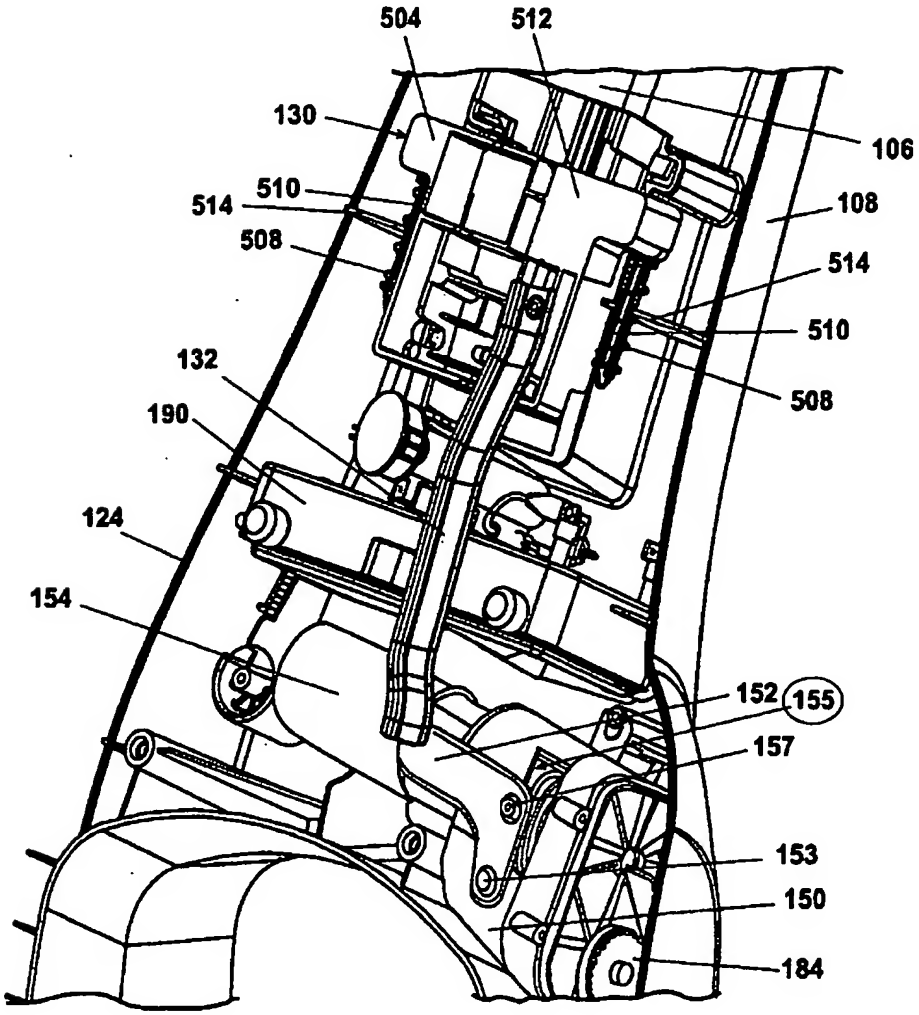

Fig. 4

Appl. No. 10/064,723
Amdt. Dated Feb. 16, 2004
Reply to Office Act of Nov. 17, 2004
Annotated Sheet Showing Changes

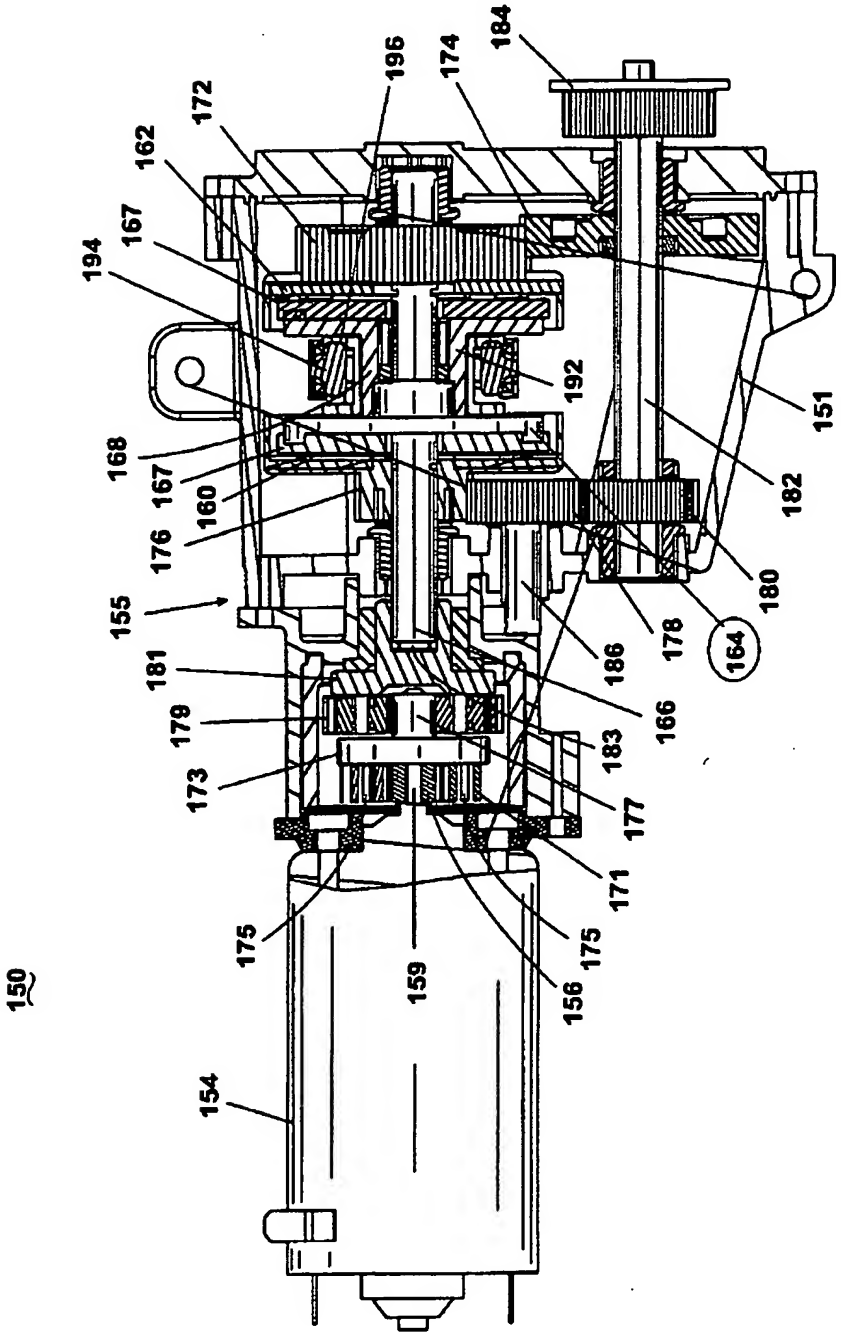

Fig. 5

Appl. No. 10/064,723
Amdt. Dated Feb. 16, 2004
Reply to Office Action of Nov. 17, 2004
Annotated Sheet Showing Changes

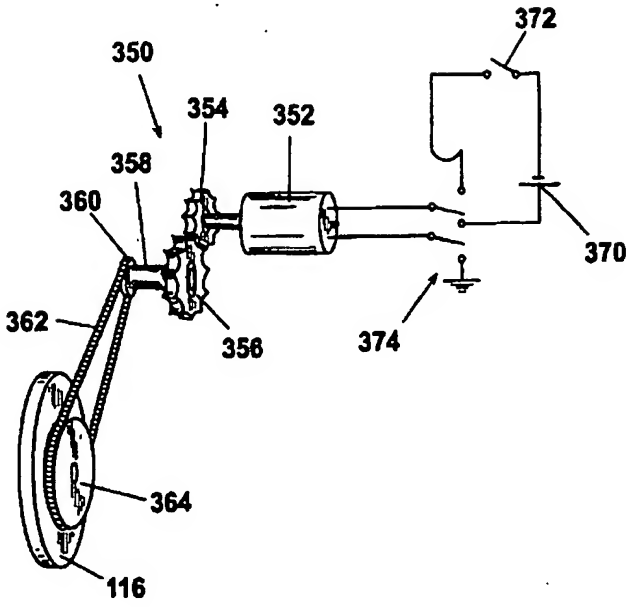

Fig. 10

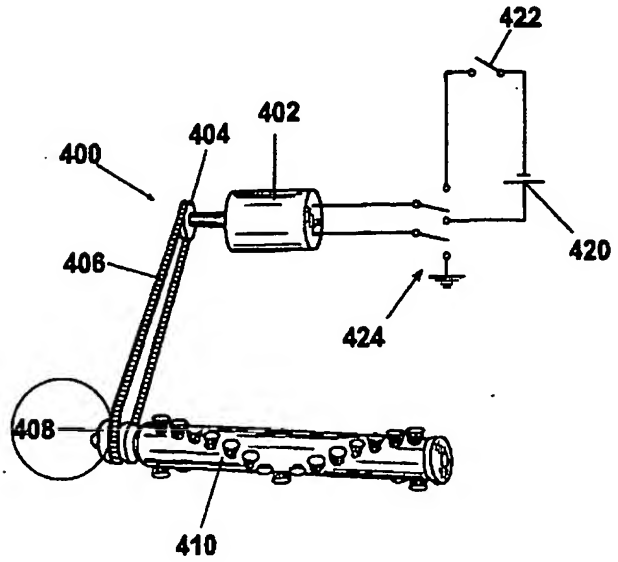

Fig. 11

Appl. No. 10/064,723
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Reply to Office Action of Nov. 17, 2004
Annotated Sheet Showing Changes

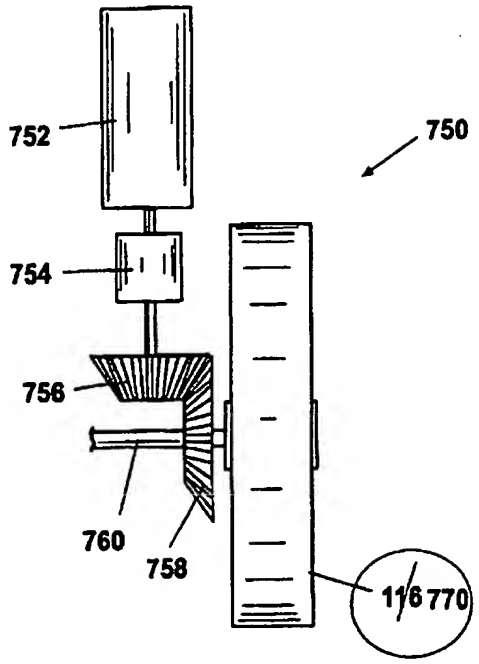

Fig. 16

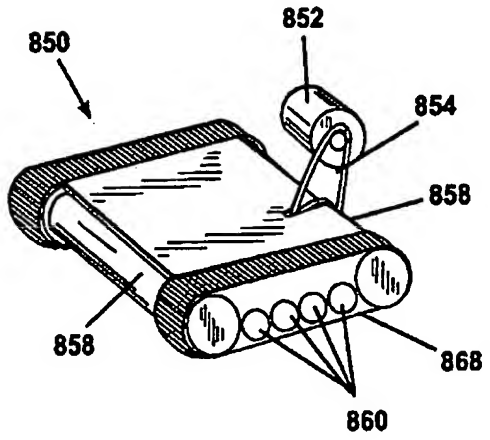

Fig. 17

Appl. No. 10/064,723
Amdt. Dated Feb. 16, 2004
Reply to Office Act of Nov. 17, 2004
Annotated Sheet Showing Changes

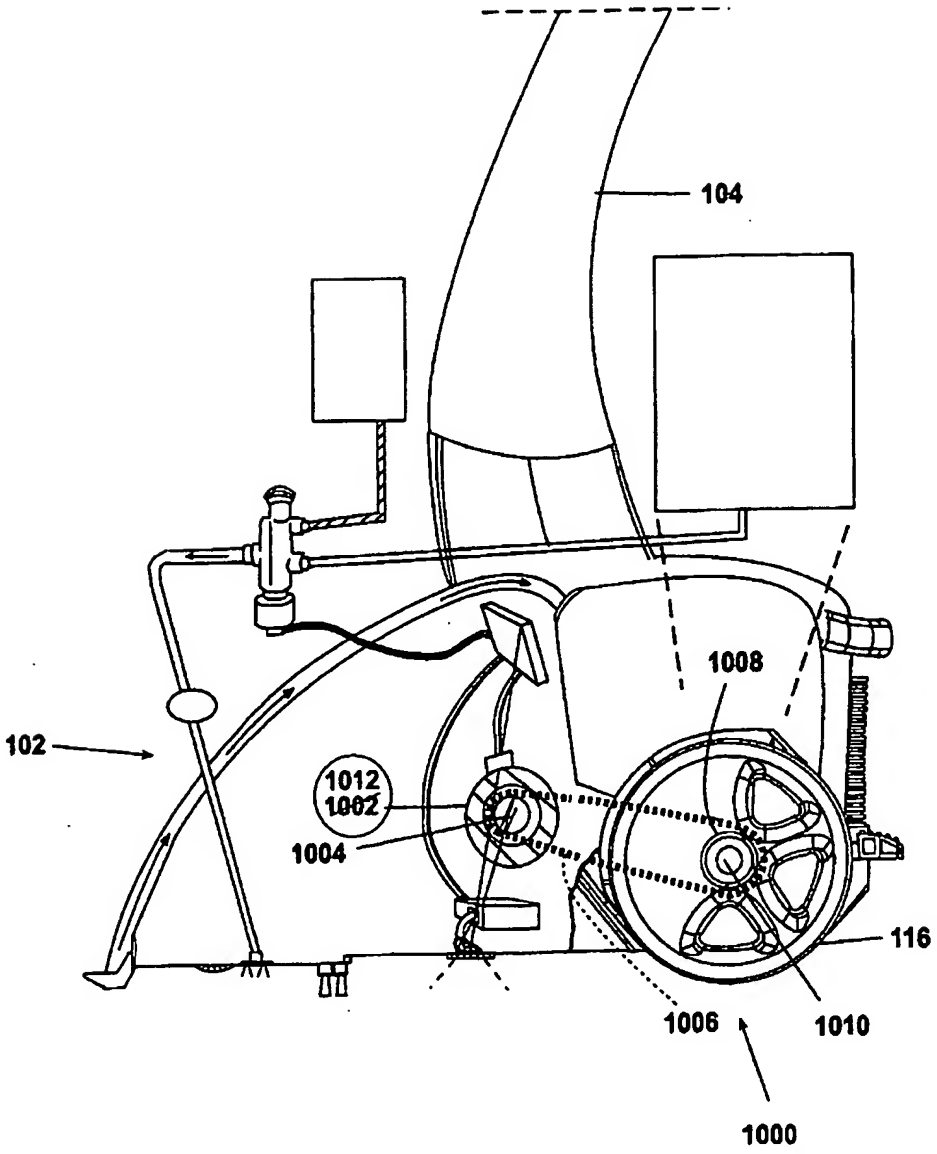

Fig. 18

Appl. No. 10/064,723
Amdt. Dated Feb. 16, 2004
Reply to Office Act of Nov. 17, 2004
Replacement Sheet

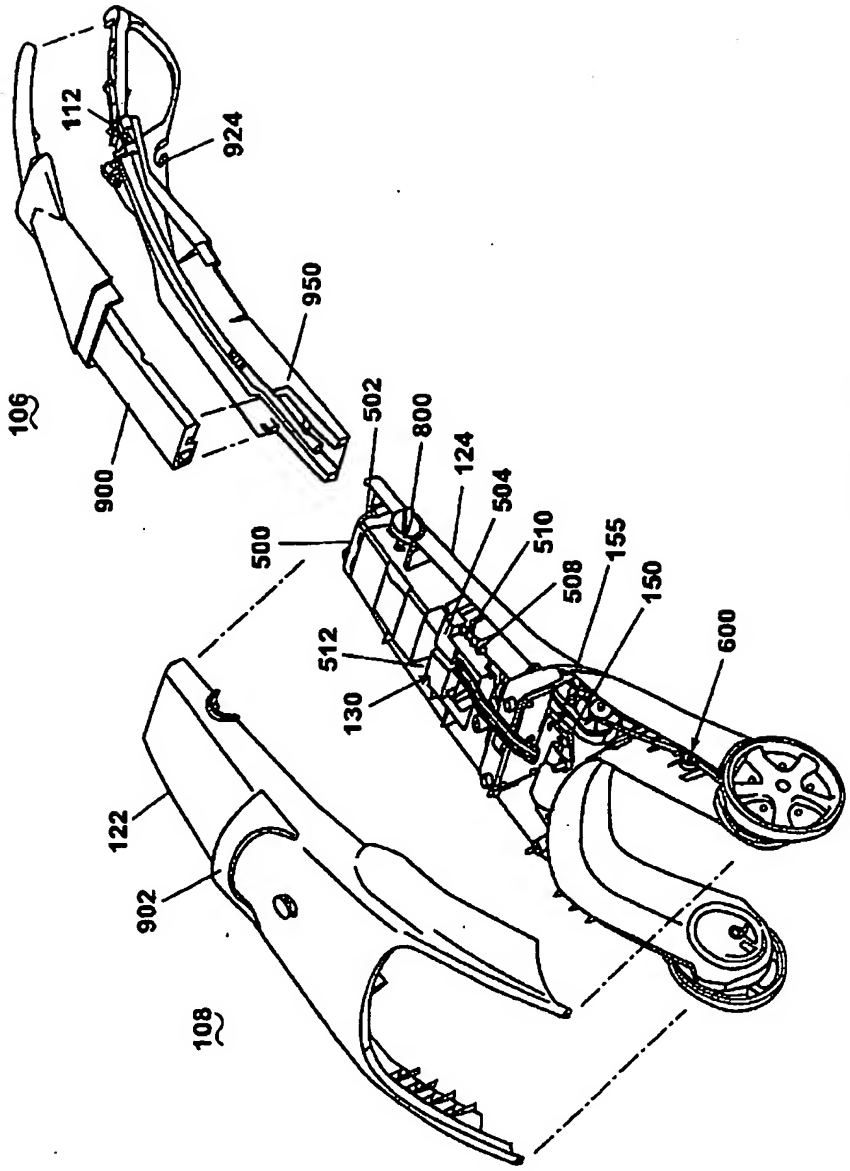

Fig. 2

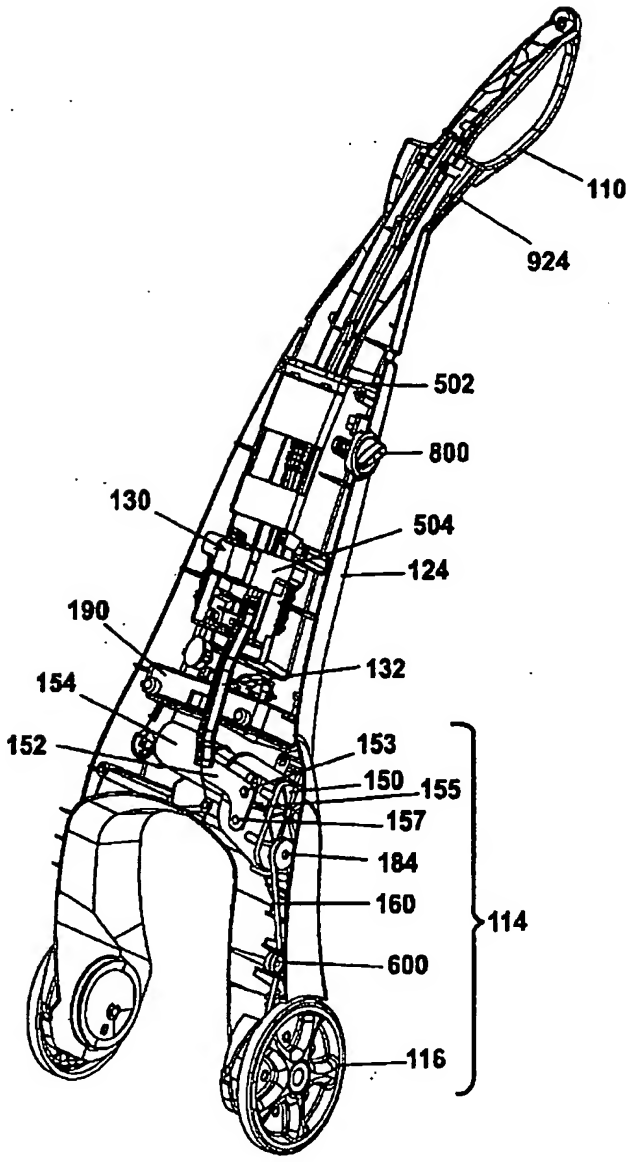
110
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Fig. 3

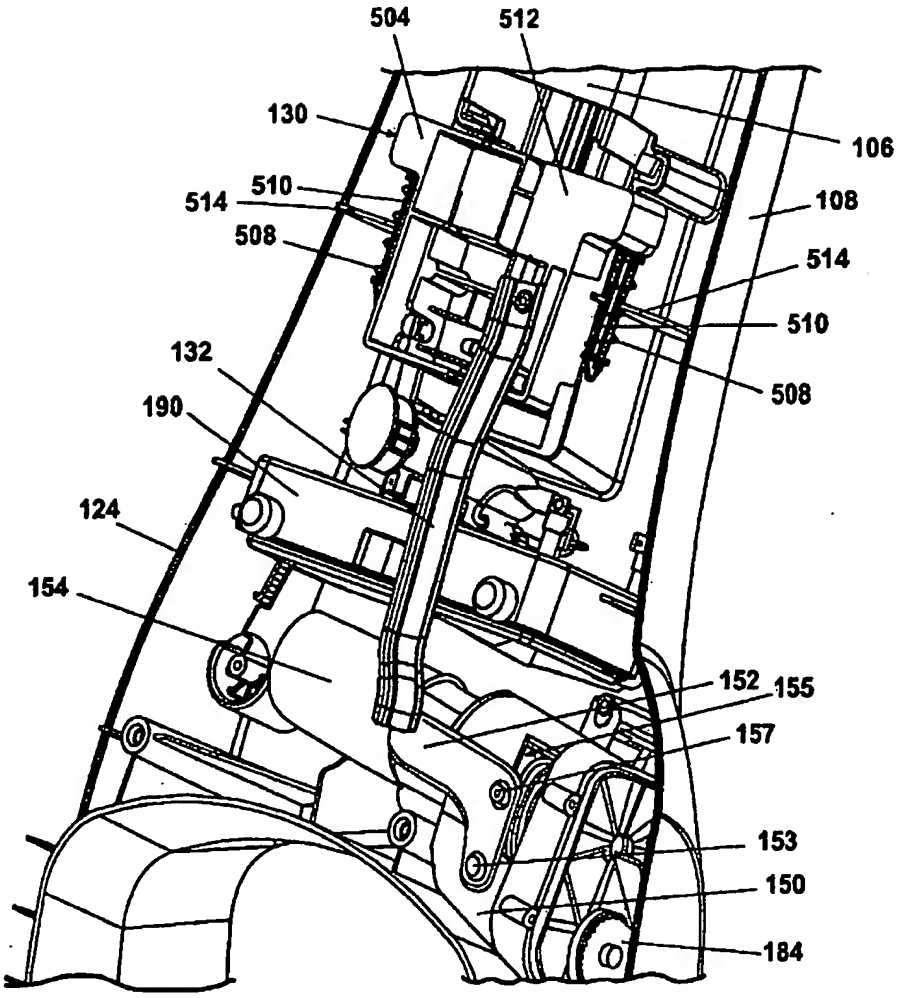
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Fig. 4

Appl. No. 10/064,723
Amdt. Dated Feb. 16, 2004
Reply to Office Act of Nov. 17, 2004
Replacement Sheet

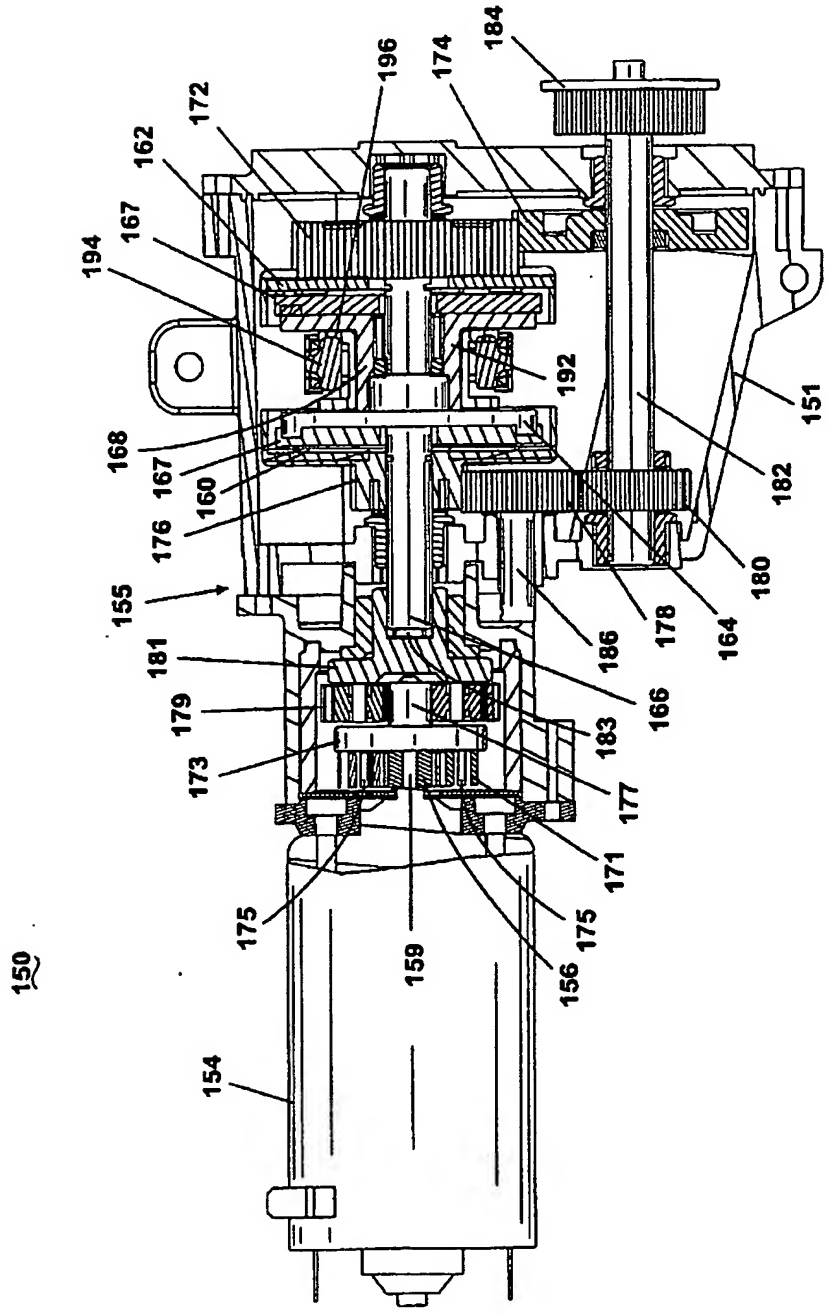

Fig. 5

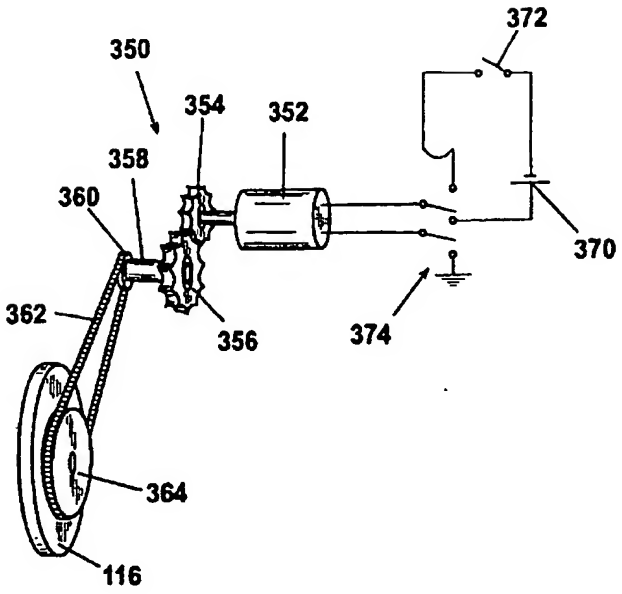
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Fig. 10

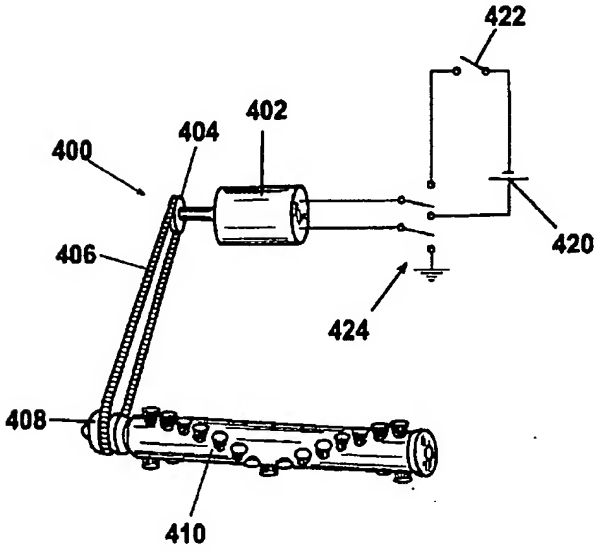
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Fig. 11

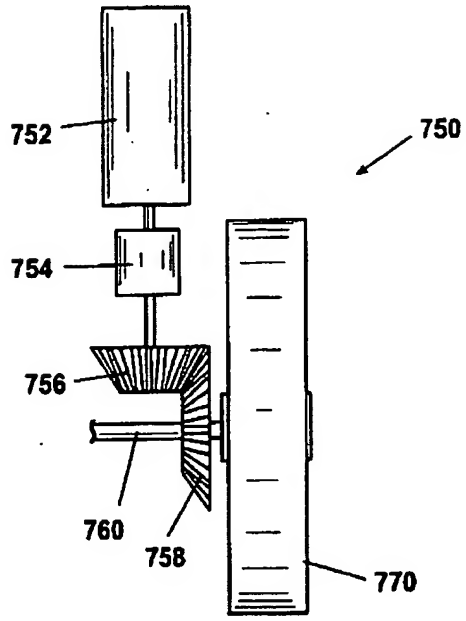

Fig. 16

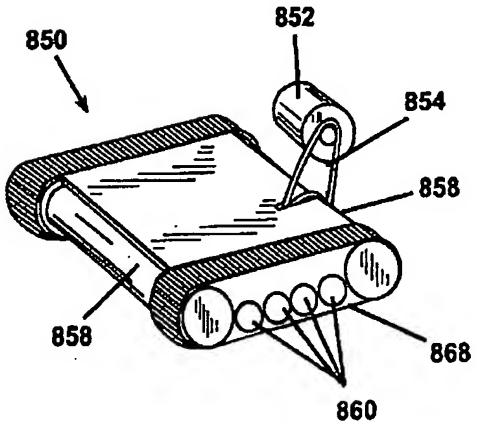

Fig. 17

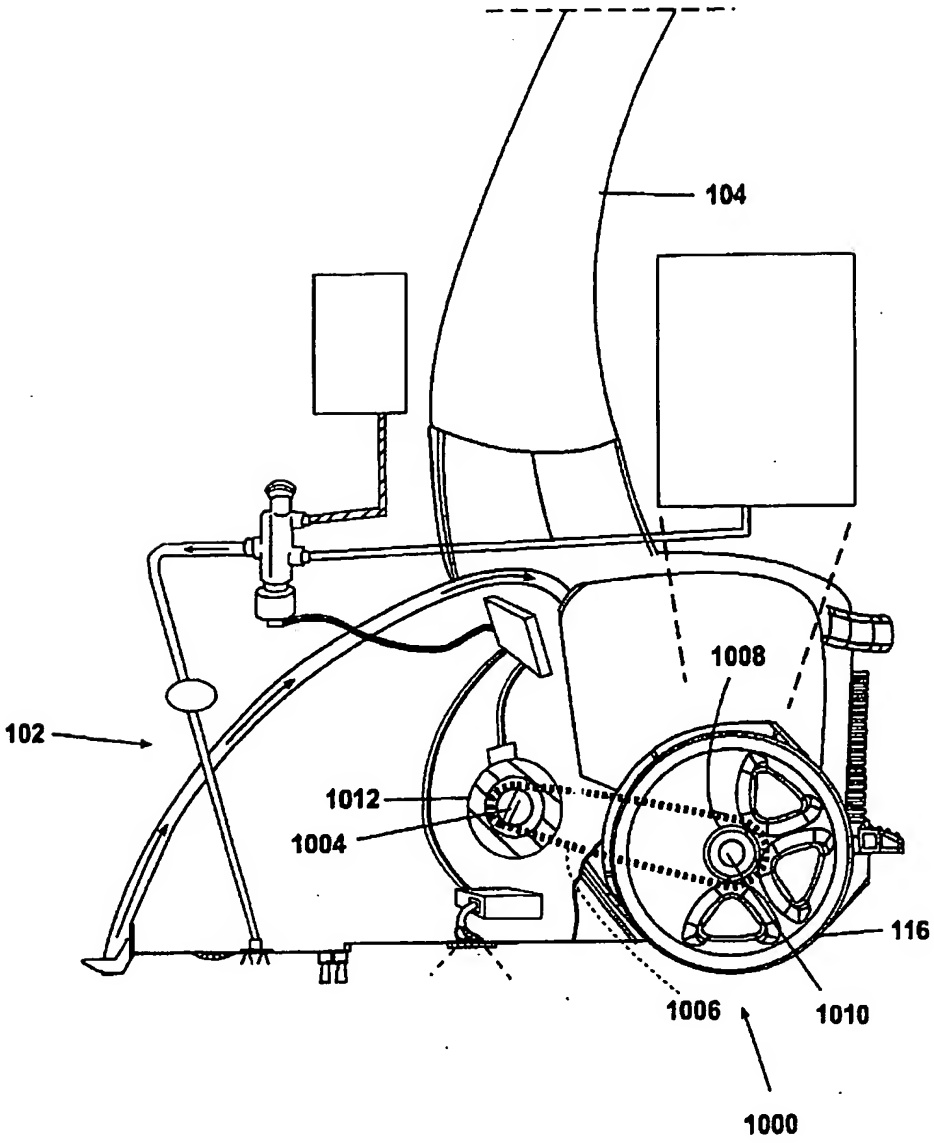

Fig. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,723	08/09/2002	Gary A. Kasper	71189-1423	4232

20915 7590 05/17/2005

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GRAND RAPIDS, MI 49503

EXAMINER	
SNIDER, THERESA T	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/064,723	KASPER ET AL.	
	Examiner	Art Unit	
	Theresa T. Snider	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *47* is/are allowed.

6)☒ Claim(s) *1,2,4-8,13-15,22-24,30-32,36-38,41-46 and 48-50* is/are rejected.

7)☒ Claim(s) *3, 9-12, 16-21, 25-29, 33-35 and 39-40* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 42 and 46 are objected to because of the following informalities: Claim 42, line 6, ';' should be inserted after 'cleaned'. Claim 46, line 16, 'and' should be inserted after 'direction;'. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 42-46 and 48-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 42, line 13, 'assembly' should be inserted after 'transmission'.

Claim 43, line 18, 'assembly' should be deleted;

Line 21, 'the operator' should be replaced with 'an operator'.

Claim 46, line 18, 'assembly' should be deleted.

Claim 48, line 4,'the drive' lacks proper antecedent basis.

Claim 49, line 19, 'assembly' should be deleted.

Dependent claim 49 should be renumbered to claim '50'.

Claim '50', line 3, 'the liquid distributor' lacks proper antecedent basis.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-2, 4, 13-14, 22-23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted State of the Prior Art as set forth in the preamble Jepson claim(hereafter ASPA) in view of Ripple.

ASPA discloses a similar cleaning apparatus however fails to disclose a traction driver mounted to the base.

Ripple discloses a surface cleaning apparatus having a traction driver mounted to the base of a housing for movement along a surface to be cleaned (fig. 1, #6, col. 6, lines 69-72). Ripple discloses a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface (col. 3, lines 12-20). It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Ripple in ASPA to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

With respect to claim 2, Ripple discloses the power drive assembly including a drive motor coupled to the traction driver and a drive actuator on the handle (col. 3, lines 12-20, claim 4).

With respect to claim 4, Ripple discloses an electric motor and a transmission assembly (col. 3, lines 12-20).

With respect to claim 13, Ripple discloses a unidirectional drive motor and a reversible transmission assembly (col. 4, lines 8-36).

With respect to claim 14, Ripple discloses a belt between the transmission assembly and the driver (col. 3, line 15).

With respect to claim 22, Ripple discloses a drive actuator on the handle (claim 4).

With respect to claim 23, Ripple discloses the actuator adapted to control forward and reverse movement of the base (col. 1, lines 40-46).

With respect to claim 31, Ripple discloses the traction driver being one of at least two wheels to support the base (fig. 1, #6).

5. Claims 1-2, 4-6, 13-14, 22-23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted State of the Prior Art as set forth in the preamble Jepson claim(hereafter ASPA) in view of Meyer et al.('740)

ASPA discloses a similar cleaning apparatus however fails to disclose a traction driver mounted to the base.

Meyer et al.('740) discloses a surface cleaning apparatus having a traction driver mounted to the base of a housing for movement along a surface to be cleaned (fig. 1, #16). Meyer et al.('740) discloses a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface (col. 3, lines 18-23). It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Meyer et al.('740) in ASPA to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

With respect to claim 2, Meyer et al.('740) discloses the power drive assembly including a drive motor coupled to the traction driver and a drive actuator on the handle (col. 3, lines 18-23, col. 6, line 66-col. 7, line 25).

With respect to claim 4, Meyer et al.('740) discloses an electric motor and a transmission assembly (col. 3, lines 18-23).

With respect to claim 5, Meyer et al.('740) discloses two drive trains, one for each direction and a clutch moveable between the drive trains (col. 7, lines 2-25).

With respect to claim 6, Meyer et al.('740) discloses the drive actuator connected to the clutch (col. 7, lines 18-21).

With respect to claim 13, Meyer et al.('740) discloses a unidirectional drive motor and a reversible transmission assembly (col. 6, line 66-col. 7, line 25).

With respect to claim 14, Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

With respect to claim 22, Meyer et al.('740) discloses a drive actuator on the handle (claim 6).

With respect to claim 23, Meyer et al.('740) discloses the actuator adapted to control forward and reverse movement of the base (claim 6).

With respect to claim 31, Meyer et al.('740) discloses the traction driver being one of at least two wheels to support the base (fig. 1, #16).

6. Claims 7-8, 15, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Meyer et al.('740) as applied to claim 1 above, and further in view of Martin et al..

ASPA in view of Meyer et al.('740) discloses a similar cleaning apparatus however fails to disclose the drive actuator being a handle grip or the inclusion of a belt tensioner.

Martin et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 4, lines 11 and 23-36). It would have been obvious to one of

ordinary skill in the art to provide the actuator of Martin et al. in ASPA in view of Meyer et al.('740) to allow for directing of the apparatus over a surface with the handle without accidentally changing direction.

With respect to claim 8, Martin et al. discloses a cable connected between the grip and the clutch (fig. 2, #200).

With respect to claim 15, Martin et al. disclose the use of a belt tensioner assembly to maintain tension in a belt (col. 5, lines 29-33). It would have been obvious to one of ordinary skill in the art to provide the tensioner of Martin et al. on the drive belt, as well as on the agitator belt, to ensure the belt is in proper tension for the most effective operation.

With respect to claims 25 and 28, Martin et al. discloses the drive actuator biased to a neutral position and having a lock (col. 8, lines 6-45).

7. Claims 7-8, 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Ripple as applied to claim 1 above, and further in view of Martin et al..

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose the drive actuator being a handle grip or the inclusion of a belt tensioner.

Martin et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 4, lines 11 and 23-36). It would have been obvious to one of ordinary skill in the art to provide the actuator of Martin et al. in ASPA in view of Ripple to allow for directing of the apparatus over a surface with the handle without accidentally changing direction of the driver.

With respect to claim 8, Martin et al. discloses a cable connected between the grip and the clutch (fig. 2, #200).

With respect to claim 15, Martin et al. disclose the use of a belt tensioner assembly to maintain tension in a belt (col. 5, lines 29-33). It would have been obvious to one of ordinary skill in the art to provide the tensioner of Martin et al. on the drive belt, as well as on the agitator belt, to ensure the belt is in proper tension for the most effective operation.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Ripple as applied to claim 1 above, and further in view of Barnhart.

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose a carry handle affixed to the handle.

Barnhart discloses a cleaning apparatus with an upright handle and a carry handle on the handle (fig. 1, unnumbered region at lower end of handle). It would have been obvious to one of ordinary skill in the art to provide the carry handle of Barnhart in ASPA in view of Ripple to allow having better positioning to carry the apparatus from one place to another without having to lift by the gripping region.

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA in view of Meyer et al.('740) as applied to claim 1 above, and further in view of Barnhart.

ASPA in view of Ripple discloses a similar cleaning apparatus however fails to disclose a carry handle affixed to the handle.

Barnhart discloses a cleaning apparatus with an upright handle and a carry handle on the handle (fig. 1, unnumbered region at lower end of handle). It would have been obvious to one of ordinary skill in the art to provide the carry handle of Barnhart in ASPA in view of Ripple to allow having better positioning to carry the apparatus from one place to another without having to lift by the gripping region.

10. Claims 32, 35-38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Louis et al. in view of Meyer et al.('740) and McCormick.

Louis et al. discloses a similar cleaning apparatus however fails to disclose a traction driver or grip actuator.

Louis et al. discloses a housing including a base and an upright handle (fig. 1, #2, 4).

Louis et al. discloses at least two wheels mounted to the base (fig. 1, unnumbered element to left of #150).

Louis et al. discloses a liquid dispensing system (col. 6, lines 42-60).

Louis et al. discloses a fluid recovery system (col. 4, line 64-col. 5, line 9).

Louis et al. discloses a vacuum source (col. 4, lines 38-41).

Meyer et al.('740) discloses a surface cleaning apparatus having a drive motor connected between a transmission assembly and one of the wheels (fig. 1, #16, col. 3, lines 18-23).

It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Meyer et al.('740) in Louis et al. to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

Meyer et al.('740) discloses two drive trains, one for each direction and a clutch

moveable between the drive trains (col. 7, lines 2-25).

Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

McCormick discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 5, lines 34-37). It would have been obvious to one of ordinary skill in the art to provide the actuator of McCormick in Louis et al. in view of Meyer et al.(740) to allow for directing of the apparatus over a surface with the handle without accidentally changing direction of the driver.

McCormick discloses a link connected between the grip and the clutch (fig. 2, #66).

With respect to claims 35 and 38, McCormick discloses a portion of the power drive assembly mounted to the handle (figs. 1-2, #36,40). It would have been obvious to one of ordinary skill in the art to provide the power drive assembly of Louis et al. in view of Meyer et al.('740) in the handle, as disclosed by McCormick, to provide for a lighter base for propulsion across a surface.

With respect to claims 36 and 37, McCormick discloses the vacuum motor and drive motor are independent of each other. It would have been obvious to one of ordinary skill in the art to provide the independent motors of McCormick in Louis et al. in view of Meyer et al.('740) to prevent the suction motor from constraining the drive speed of the drive assembly.

With respect to claim 41, Louis et al. discloses the recovery tank provided in a lip of the base, therefore it is mounted in the base (fig. 1, #7, unnumbered region above lead line of #150).

11. Claims 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Louis et al. in view of Meyer et al.('740) and Frederick et al..

Louis et al. discloses a similar cleaning apparatus however fails to disclose a traction driver, grip actuator or lock.

Louis et al. discloses a housing including a base and an upright handle (fig. 1, #2, 4).

Louis et al. discloses at least two wheels mounted to the base (fig. 1, unnumbered element to left of #150).

Louis et al. discloses a liquid dispensing system (col. 6, lines 42-60).

Louis et al. discloses a fluid recovery system (col. 4, line 64-col. 5, line 9).

Louis et al. discloses a vacuum source (col. 4, lines 38-41).

Meyer et al.('740) discloses a surface cleaning apparatus having a drive motor connected between a transmission assembly and one of the wheels (fig. 1, #16, col. 3, lines 18-23).

It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Meyer et al.('740) in Louis et al. to aid in reducing operator fatigue by providing for a self-propelled cleaning apparatus.

Meyer et al.('740) discloses two drive trains, one for each direction and a clutch moveable between the drive trains (col. 7, lines 2-25).

Meyer et al.('740) discloses a belt between the transmission assembly and the driver (col. 3, line 20).

Frederick et al. discloses a cleaning apparatus with an upright handle provided with a handle grip as a drive actuator (col. 5, lines 34-37). It would have been obvious to one of ordinary skill in the art to provide the actuator of McCormick in Louis et al. in view of Meyer et al.(740) to allow for directing of the apparatus over a surface with the handle

without accidentally changing direction of the driver.

Frederick et al. discloses a connection between the grip and the clutch (fig. 1, #18).

Frederick et al. discloses a lock mounted on the handle for locking the handle grip (col. 5, lines 22-26 and col. 6, lines 10-18).

With respect to claim 44, it would have been obvious to one of ordinary skill in the art to determine the most appropriate lock structure in Louis et al. in view of Meyer et al.('740) and Frederick et al. to allow for the greater ease in operation.

With respect to claim 45, Frederick et al. discloses handle grip biased to a neutral position for disablement of the drive assembly (col. 5, lines 22-26 and col. 6, lines 3-7).

With respect to claim 46, Frederick et al. discloses a rigid connection between the handle grip and the power drive assembly (col. 6, lines 61-65).

Response to Arguments

12. Applicant's arguments filed 2/16/2005 have been fully considered but they are not persuasive. Applicant urges that there is no motivation to provide the traction driver of Ripple into the ASPA. This is not found persuasive because Ripple discloses the use of the traction driver on 'other surface treating devices such as polishers, scrubbers and the like'(col. 6, lines 68-72). It is believed an extraction cleaner can be considered 'other surface treating devices such as polishers, scrubbers and the like'. Further, though Examiner believes one would be motivated to provide a traction driver in the ASPA to would reduce operator fatigue by providing for a self-propelled machine, Ripple discloses that the use of a traction driver insures that a 'cleaner will be

moved over a carpet or other surface being cleaned at an optimum and uniform rate in order to secure uniform cleaning under the most effective condition' (col. 7, lines 10-15).

Applicant urges that the drive actuator of Ripple is not on the handle. Applicant is believed to be in error with his argument because Ripple discloses use of the handle to provide for actuation of the drive motor (col. 3, lines 12-20, claim 4). Therefore, the actuator can be considered 'on' on the handle.

Applicant urges that Ripple does not disclose a belt between a transmission assembly and the traction driver. Applicant is believed to be in error with his argument because Ripple discloses a belt between a transmission assembly and the traction driver (col. 3, lines 12-29). Does Applicant mean that the belt is directly connected to the traction driver, without any intervening elements?

Applicant urges that there is no motivation to provide the traction driver of Meyer et al. into the ASPA. This is not found persuasive because Meyer et al. discloses the use of the traction driver on 'handle controlled wheeled appliance'(col. 1, lines 37-38). It is believed an extraction cleaner can be considered a 'handle controlled wheeled appliance. Examiner believes one would be motivated to provide a traction driver in the ASPA to would reduce operator fatigue by providing for a self-propelled machine and to allow for cleaning at a uniform rate over a surface.

Applicant urges that the drive actuator of Meyer et al. is not on the handle. Applicant is believed to be in error with his argument because Meyer et al. discloses use of the handle to provide for actuation of the drive motor (col. 6, line 66-col. 7, line 25). Therefore, the actuator can be considered 'on' on the handle.

Applicant urges that Meyer et al. does not disclose a belt between a transmission assembly and the traction driver. Applicant is believed to be in error with his argument because Meyer et al. discloses a belt between a transmission assembly and the traction driver (col. 3, lines 18-23). Does Applicant mean that the belt is directly connected to the traction driver, without any intervening elements?

Applicant urges there is no motivation to provide the drive actuator of Martin et al. on either the above combinations of references. Applicant is believed to be in error with his arguments because, Ripple, Meyer et al. and Martin et al. disclose traction drivers. Martin et al. discloses an alternate means for actuating the driver. It is believed that replacing one actuating with the other is well within the skill of one of ordinary skill in the art.

Applicant urges that one would not be motivated to provide the belt tensioner of Martin et al. into either of the above combination of references. Applicant is believed to be in error with his argument because it is believed that the advantage of having a belt tensioner, to ensure proper tension in a drive belt, would be true for any drive belt, irrespective of it's location.

Applicant urges that there is no motivation to combine the carrying handle of Barnhart with the above combination of references. Applicant is believed to be in error with his arguments because Barnhart discloses the inclusion of a carrying handle with an upright handle. It is believed it would have been obvious to one of ordinary skill in the art to provide a carrying handle on the upright handles of the above combination of references to allow for less cumbersome movement of the apparatus up and down stairs.

Applicant urges that the turbine drive of Louis et al. does not have a belt drive between the turbine motor and the brushes. This argument is not persuasive because, unlike the argument

for claim 12, claim 32 does not require the turbine motor to drive the housing. The secondary references provide the traction driving system and the belt therewith.

Allowable Subject Matter

13. Claim 47 is allowed.

14. Claims 3, 9-12, 16-21, 25-29, 33-35 and 39-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claim 49 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

16. Claims 42 and 48-49 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses an extraction surface cleaning apparatus with a housing including a base and an upright handle, a liquid dispensing system, a fluid recovery system, a traction driver and power drive assembly HOWEVER fails to disclose or fairly suggest the traction driver including a drive motor that is a reversible electric motor OR the transmission assembly including the structure set froth in claim 9 OR the power drive assembly including an air drive turbine motor OR the assembly including a belt tensioner having a plate slidably mounted to the housing, a pair of wheels rotatably mounted on the plate and a belt weaved between the wheels OR the power drive having a drive motor mounted on the housing and a flexible cable in driving relationship at

one end with the motor and in driving relationship at the other end with the traction driver OR the power drive including a wheel sprocket non-rotatably connected tot eh traction driver and a drive motor mounted on the housing in driving relationship with the wheel sprocket OR the traction driver and power drive assembly including the structure as set forth in claim 20 OR the traction driver including the structure as set froth in claim 21 OR the assembly further including a drive actuator the is biased to a neutral position between the forward and rearward positions for disablement of the power drive assembly when the handle is in a reclining position OR there being a direct connection between the drive motor and the transmission assembly OR the assembly further including a handle grip with the connection between the grip and the power drive assembly includes a mounting block, slidable on the handle and a solution valve of the liquid dispensing system is mounted to the sliding block for movement therewith.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Theresa T. Snider
Primary Examiner
Art Unit 1744

THERESA T. SNIDER
PRIMARY EXAMINER

5/16/2005

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Gary A. Kasper et al.	
For:	EXTRACTION CLEANER WITH POWER DRIVE	
Serial No.:	10/064,723	Examiner: Theresa T. Snider
Filed:	08/09/02	Group Art Unit: 1744
Atty. Docket:	71189-1423	Confirmation No: 4232

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA, 22313-1450.

☒ transmitted by facsimile to the Patent and Trademark Office, to Examiner Theresa T. Snider at (571) 273-8300.

Signature

Date: July 15, 2005

Christine M. Judice
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the office action mailed May 17, 2005, kindly amend the above-identified patent application as follows:

Amendments to the Claims appear in the complete listing of claims which beings on page 2 of this paper.

Remarks/Arguments begin on page 18 of this paper.

Amendments to the Claims

Please amend the claims as shown below in the complete listing of claims.

1. (Currently Amended) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing and including:

a liquid dispenser for applying liquid to the surface to be cleaned;

a fluid supply chamber for holding a supply of cleaning fluid;

a fluid supply conduit fluidly connected to the fluid supply chamber and to the liquid dispenser for supplying fluid to the dispenser;

a fluid recovery system mounted to the housing and including:

a recovery chamber for holding recovered fluid;

a suction nozzle;

a working air conduit extending between the recovery chamber and the suction nozzle; and

a vacuum source mounted to the housing and in fluid communication with the recovery chamber for generating a flow of working air from the suction nozzle through the working air conduit and to the recovery chamber to thereby draw dirty liquid from the surface to be cleaned through the suction nozzle and the working air conduit, and into the recovery chamber;

the improvement which comprises:

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned; and

a power drive assembly including an air drive turbine motor mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned.

2-9. (Cancelled)

10. (Currently Amended) The extraction surface cleaning apparatus of claim 952 wherein a projection of the drive axle onto the one of the radial surfaces of the flywheel defines a diametrical line across the flywheel and the drive wheel contact with the flywheel is along the diametrical line, whereby axial shifting of the drive wheel along the drive axle changes the gear ratio and can also change the direction of rotation of the drive axle.

11. (Original) The extraction cleaning apparatus of claim 10 and further comprising a worm gear driven by the motor and wherein the flywheel has an outer circumferential gear edge that is driven by the worm gear.

12-15. (Cancelled)

16. (Currently Amended) The extraction surface cleaning apparatus of claim ~~15~~ 53 wherein the belt tensioner assembly comprises a plate slidably mounted to the housing, a pair of wheels rotatably mounted on the plate and the belt is weaved between the wheels so that proper tension is maintained when the belt is driven in either direction.

17-18. (Cancelled)

19. (Currently Amended) The extraction surface cleaning apparatus according to claim ~~18~~55 wherein the drive motor is mounted to the handle and further comprising a belt operably connected to the drive motor and the wheel sprocket for driving the traction driver.

20-25. (Cancelled)

26. (Currently Amended) The extraction surface cleaning apparatus of claim ~~25~~58 wherein the drive actuator further comprises a mounting block slidable on the handle and further comprising a solution valve mechanism in the fluid supply conduit mounted to the sliding block for movement therewith.

27. (Currently Amended) The extraction surface cleaning apparatus of claim 26 and further comprising a solution valve actuator mounted to the handle grip and connected to the solution valve mechanism to control the flow of cleaning fluid through the solution valve mechanism to the liquid dispenser from the fluid supply chamber.

28. (Currently Amended) The extraction surface cleaning apparatus of claim ~~25~~58 and further comprising a lock for selectively locking the handle grip in the neutral position when the handle is in a reclining position.

29. (Currently Amended) The extraction surface cleaning apparatus of claim 28 wherein the lock comprises an aperture in the handle grip and an aperture in the upper end portion of the handle and apertures aligned with each other when the handle grip is in the neutral position; and

a pin selectively moveable between a locked position wherein the pin is positioned within both of the apertures and an unlocked position wherein the pin is retracted from at least one of the two apertures.

30. (Currently Amended) The extraction surface cleaning apparatus of claim ~~1~~58 and further comprising a carry handle affixed to the upright handle.

31. (Cancelled)

32. (Previously presented) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

at least two wheels mounted to the base for supporting the housing for movement along the surface to be cleaned;

a liquid dispensing system mounted to the housing and including:

a liquid dispenser for applying liquid to the surface to be cleaned;

a fluid supply chamber for holding a supply of cleaning fluid;

a fluid supply conduit fluidly connected to the fluid supply chamber and to the liquid dispenser for supplying fluid to the liquid dispenser;

a fluid recovery system mounted to the housing and including:

a recovery chamber for holding recovered fluid;

a suction nozzle;

a working air conduit extending between the recovery chamber and the suction nozzle; and

a vacuum source mounted to the housing and in fluid communication with the recovery chamber for generating a flow of working air from the suction nozzle through the working air conduit and through the recovery chamber to thereby draw dirty liquid from the surface to be cleaned through the suction nozzle and the working air conduit, and into the recovery chamber;

a drive motor comprising a unidirectional electric motor mounted on the housing;

a transmission assembly operably connected between the drive motor and at least one of the wheels for selectively connecting the drive motor with the at least one wheel, the transmission assembly including a first gear train selectively connected between the drive motor and the at least one wheel for driving the base in a forward direction;

a second gear train selectively connected between the drive motor and the at least one wheel for driving the base in a reverse direction;

a clutch mechanism moveable between the first and second gear trains to alternately connect the first and second gear trains between the drive motor and the at least one wheel;

a belt drive connecting the transmission assembly to the at least one wheel, the belt drive including a tension adjuster for maintaining a predetermined tension on the belt when the base is driven in the front and the rear directions;

the handle having a grip mounted to an upper end thereof, the grip being slidably mounted on the upper end of the handle between an extended position, a neutral position and a retracted position;

a drive actuator mounted on the grip portion and moveable therewith;

a link between the grip and the clutch to move the clutch between the first gear train and the second gear train and to a neutral position between the two gear trains.

33. (Previously presented) The extraction surface cleaning apparatus according to claim 32 and further comprising a direct connection between the drive motor and the transmission assembly.

34. (Previously presented) The extraction surface cleaning apparatus according to claim 33 wherein the drive motor and the transmission assembly are both mounted to the upright handle.

35. (Previously presented) The extraction surface cleaning apparatus according to claim 32 wherein the drive motor and the transmission assembly are both mounted to the upright handle.

36. (Previously presented) The extraction surface cleaning apparatus according to claim 32 wherein the vacuum source includes a vacuum motor and the vacuum motor and the drive motor are independent of each other.

37. (Cancelled)

38. (Previously presented) The extraction surface cleaning apparatus according to claim 37 wherein at least a portion of the power drive assembly is mounted to the upright handle.

39. (Cancelled) The extraction surface cleaning apparatus according to claim 38 wherein the power drive assembly comprises a drive motor and a transmission assembly and further comprising a direct connection between the drive motor and the transmission assembly.

40. (Cancelled) The extraction surface cleaning apparatus according to claim 37 wherein the power drive assembly comprises a drive motor and a transmission assembly and further comprising a direct connection between the drive motor and the transmission assembly.

41. (Previously presented) The extraction surface cleaning apparatus according to claim 37 wherein the fluid recovery system includes a recovery tank and the recovery tank is mounted in the base.

42. (Currently Amended) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a drive motor, a transmission assembly and a direct connection between the drive motor and the transmission assembly, all mounted to the housing, wherein the transmission assembly is connected to the traction driver for selectively propelling the base over the surface to be cleaned.

43. (Currently Amended) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward, neutral and rearward positions;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned in a forward and reverse direction;

a connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base assembly in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively; and

a lock including a rotatable knob mounted on the handle and accessible to the operator for selectively locking the handle grip in the neutral position.

44. (Cancelled)

45. (Previously presented) The extraction surface cleaning apparatus of claim 43 wherein the handle grip is biased to the neutral position for disablement of the power drive assembly.

46. (Cancelled)

47. (Currently Amended) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned; ~~and~~

a flywheel mounted for rotation about a central axis having a radial surface;

the traction driver is non-rotatably mounted on a drive axle and the drive axle is mounted for rotation about an axis parallel and adjacent to the flywheel radial surface; and

a drive wheel is axially shiftable and non rotatably mounted on the drive axle for rotation therewith, and the drive wheel has an outer circumferential surface that frictionally engages the radial surface of the fly wheel and is driven thereby to transfer rotary motion of the fly wheel to rotary motion of the drive axle;

wherein shifting of the drive wheel along the drive axle from one side of the radial surface to the another side changes the direction of rotation of the drive wheel.

48. (Currently Amended) The extraction surface cleaning apparatus of claim 47 wherein the radial surface has a recessed area between the sides of the radial surface and drive wheel is adapted to be positioned in registry with the recessed area, out of contact with the radial surface to disconnect the ~~drive between the~~ flywheel ~~and~~ from the drive wheel.

49. (Currently Amended) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward, neutral and rearward positions;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid, a liquid dispenser and a fluid supply conduit, including a solution valve, between the liquid fluid supply chamber and the liquid dispenser for selectively applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned in a forward and reverse direction;

a connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base ~~assembly~~ in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively;

wherein the connection between the handle grip and the power drive assembly includes a mounting block, slidable on the handle; and

the solution valve is mounted to the ~~sliding~~ mounting block for movement therewith.

4950. Currently Amended The extraction surface cleaning apparatus of claim 4849 and further comprising a cleaning solution actuator mounted on the handle grip and connected to the solution valve for selectively opening the solution valve to control the supply of cleaning fluid to the liquid ~~distributor~~dispenser.

51. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

a reversible electric drive motor mounted to the housing and selectively coupled to the traction driver for selectively driving the traction driver in two directions and a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver to propel the base over the surface to be cleaned.

52. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

an electric drive motor mounted to the housing and a transmission assembly operably connected between the electric drive motor and the traction driver to selectively drive the traction driver in two directions;

a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver to propel the base over the surface to be cleaned; and

wherein the transmission assembly comprises:

a flywheel mounted for rotation about a central axis having a pair of parallel radial surfaces;

the traction driver is non-rotatably mounted on a drive axle and the drive axle is mounted for rotation about an axis parallel and adjacent to one of the flywheel radial surfaces;

a drive wheel is axially shiftable and non rotatably mounted on the drive axle for rotation therewith, and the drive wheel has an outer circumferential surface that rolls along one of the radial surfaces of the fly wheel to transfer rotary motion of the fly wheel to rotary motion of the drive axle;

wherein shifting of the drive wheel along the drive axle changes the gear ratio between the fly wheel and the drive wheel.

53. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

an electric drive motor mounted to the housing and a transmission assembly operably connected between the electric drive motor and the traction driver to selectively drive the traction driver in two directions, wherein the transmission is connected to the traction driver through a belt;

a belt tensioner assembly mounted to the housing to maintain tension on the belt in each of the two directions. and

a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver to propel the base over the surface to be cleaned.

54. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

a drive motor mounted to the housing and connected to the traction driver through a flexible cable in driving relationship therewith for selectively propelling the base over the surface to be cleaned.

55. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

a wheel sprocket non-rotatably connected to the traction driver for movement therewith; and

a drive motor mounted on the housing in driving relationship with the wheel sprocket for selectively propelling the base over the surface to be cleaned.

56. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned and comprising a drive brush mounted for rotation about a horizontal axis on the base;

a sprocket non-rotatably mounted to the drive brush;

a drive motor mounted to the housing; and

a belt drive between the motor and the sprocket for driving the drive brush;

wherein rotation of the drive brush results in movement of the base across the surface to be cleaned and selectively propels the base over the surface to be cleaned.

57. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned and comprising a track assembly including:

a pair of track sprockets mounted on the base for rotation about parallel, horizontally spaced axes; and

at least one track belt reeved around the track sprockets and in contact with a surface to be cleaned; and

a drive motor mounted on the housing and operably connected to one of the track sprockets for selectively driving the same for selectively propelling the base over the surface to be cleaned.

58. (New) An extraction surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a liquid dispensing system mounted to the housing;

a fluid recovery system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned;

wherein the power drive assembly includes a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward and rearward positions for selectively controlling the movement of the base in a forward and reverse direction over the surface to be cleaned; and

wherein the handle grip is biased to a neutral position between the forward and rearward positions for disablement of the power drive assembly when the handle is in a reclining position.

REMARKS

By the present amendment, claims 2-9, 12-15, 17, 18, 20-25, 31, 37, 39, 40, 44, and 46 have been cancelled. Claims 10, 16, 19, 26, 28, 30, 42, 43, and 47-50 have been amended to correct clerical errors except where noted below. Claims 51-58 have been added.

Claim 1 has been amended to include the limitations of allowed claim 12. Claim 43 has been amended to include the limitations of claim 44. New claim 51 is patterned after allowed claim 3 with the immaterial limitations from claim 1 omitted. New claim 52 is patterned after allowed claim 9, again with immaterial limitations from claim 1 omitted. New claim 53 is patterned after allowed claim 15 with the immaterial limitations of claim 1 omitted. New claim 54 is patterned after allowed claim 17 with the immaterial limitations of claim 1 omitted. New claim 56 is patterned after allowed claim 20 with immaterial limitations of claim 1 omitted. New claim 57 is patterned after allowed claim 21 with immaterial limitations of claim 1 omitted. New claim 58 is patterned after allowed claim 25 with immaterial limitations of claim 1 omitted.

All of the rejected claims have been cancelled with the exception of claim 15 (now new claim 53), independent claim 32, dependent claims 35 and 36 and independent claim 43. With the exception of claim 43, these claims are directed to the concept of a powered extraction cleaner wherein a drive belt is connected between a transmission assembly and a driven wheel and a tension adjuster maintains a predetermined tension on the belt when the base is driven in the front and rear directions.

These claims have been rejected under 35 U.S.C. § 103(a) on several different grounds including; ASPA in view of Ripple as applied in claim 1 and further in view of Martin et al.; ASPA in view of Meyer et l. '740 in view of Martin et al. '640; and Lewis in view of Meyer et al. '740 and McCormick. With respect to the combination of ASPA in view of Meyer et al. '740 in view of Martin et al., it is the Examiner's position that Meyer et al. '740 discloses a belt between the transmission assembly and a driver and Martin et al. discloses a belt tensioner. Its believed that the Examiner is in error in holding that there is a belt between the transmission assembly and the driver of Meyer et al. '740. There is a belt between the motor and the transmission assembly but no belt between the transmission assembly and the driver in Meyer et al. '740. Further, with

respect to Martin et al. '640, it does not disclose a belt tensioner on a belt between a transmission and drive wheel. Although Martin et al. '640 does disclose a belt between a transmission and a drive wheel, there is no tensioner on that belt. Further, even if the Martin et al. '640 brush tensioner were to be used on the Martin et al. '640 transmission to driver wheel belt, it still would not be functional to tension the belt both in a forward and reverse direction. The belt tensioner in Martin et al. '640 is adapted to tension the brush belt 80 which a unidirectional belt. Reversal of belt would require a different tensioner which could switch from maintaining the tension when the belt is driven in one direction to maintaining the tension when the belt is driven in an opposite direction. It does not appear that this function would be achieved by the Examiner's alleged combination. The same arguments can be made with respect to the rejection of claim 15 over ASPA in view of Ripple as applied to claim 1 and further in view of Martin et al. '640. The same logic has been used by the Examiner to reject claim 15 on the basis of this combination and this logic is faulty for the same reasons as set forth above with respect to the combination of ASPA in view of Meyer et al. '740 and Martin et al. '640.

With respect to the rejection of claim 32 over the Louis et al. '442 in view of Meyer et al. '740 and McCormick '971 it is believed that same deficiency is found in Examiner's alleged combination of references. Although Meyer et al. '740 does not disclose a belt between a transmission assembly and a driver as represented by the Examiner, Martin et al. '640 does disclose this feature. The alleged combination of Louis et al. '442 in view of Meyer et al. '740 and McCormick '971 has the same deficiencies as the other rejections in that there is no disclosure of a belt tensioner on a belt between a transmission and a driver wheel wherein the belt tensioner is functional to maintain the tension in the belt in both forward and reverse directions.

Reconsideration of the rejection of claim 15 (now claim 53) and claims 32, 35, and 36 in view of the foregoing is respectfully requested.

Claims 43-46 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Louis et al. '442 in view of Meyer et al. '740 and Frederick et al. '862. This rejection is respectfully traversed. Louis et al. '442 discloses a carpet extractor with an automatic conversion

valve. It does not relate to the power drive mechanism. The patent to Mayer et al. '740 relates to a transmission for a vacuum cleaner that is responsive to pushing and pulling forces on the handle. The Frederick et al. '862 patent relates to a self-propelled vacuum cleaner with a lockout feature on the handle for manually locking the grip on the handle in a neutral position. The lockout feature comprises a slide on the handle which moves between the lockout position and an actuation position in a T-shaped slot.

The alleged combination of Louis et al. '442, Meyer et al. '740, and Frederick et al. '862 is traversed. There is no basis for making the alleged combination. The Examiner has given us no reasons why these disclosures can be combined. Indeed, there is no disclosure in any of the references which would warrant their combination. Thus, the alleged combination is inappropriate.

Claim 43 has been amended to incorporate the limitations of claim 44 which has been cancelled. Claim 43, as amended, calls for a lock, including a rotatable knob, mounted on the handle and accessible to the operator for selectively locking the handle grip in a neutral position. This concept is not disclosed in any of the references.

Thus, even if the alleged combination of Louis et al. '442, Meyer et al. '740, Frederick et al. '862 were to be combined, however untenably, it still would not reach the claimed invention of claim 43. The alleged combination would not include a lock with a rotatable knob mounted on the handle for selectively locking the handle grip in a neutral position. It is believed therefore that claims 43 and 45 are not obvious in view of the Louis et al. '442, the Meyer et al. '740, and the Frederick et al. '842 patents.

Reconsideration of the rejection of claims 44 and 45 in view of the foregoing remarks is respectfully requested.

Examiner: Theresa T. Snider
Group Art Unit: 1744

In view of the foregoing remarks and amendments it is submitted that all of the claims in this application are in condition for allowance. Early notification of allowability is respectfully requested. If the Examiner does not believe that all of the claims are in condition for allowance, the courtesy of a telephone interview with the undersigned attorney is respectfully requested.

Respectfully submitted,

Gary A. Kasper et al.

Dated: 7·15·05

By: _____

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EXAMINER	
SNIDER, THERESA T	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/064,723	KASPER ET AL	
	Examiner	Art Unit	
	Theresa T. Snider	1744	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,10,11,16,19,26-30,32-36,38,41-43,45 and 47-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,10,11,19,26-30,32-36,41,43,45,47-50,52 and 54-58* is/are allowed.

6)☒ Claim(s) *16, 38, 42, 51 and 53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *8/3/2005*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16, 38 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 38, line 2, the claim is dependent from a cancelled claim.

Claim 53, line 10, 'assembly' should be inserted after 'transmission'.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Louis et al. in view of Camarata et al..

Louis et al. discloses a similar cleaning apparatus however fails to disclose a traction driver or drive motor.

Louis et al. discloses a housing including a base and an upright handle (fig. 1, #2, 4).

Louis et al. discloses at least two wheels mounted to the base (fig. 1, unnumbered element to left of #150).

Louis et al. discloses a liquid dispensing system (col. 6, lines 42-60).

Louis et al. discloses a fluid recovery system (col. 4, line 64-col. 5, line 9).

Louis et al. discloses a vacuum source (col. 4, lines 38-41).

Camarata et al. discloses a surface cleaning apparatus having a drive motor connected to a traction driver by way of a direct connection with the transmission (fig. 3, traction driver-#13,15, motor-2, transmission-#7,89,11). It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Camarata et al. in Louis et al. to aid in reducing operator fatigue and allow for uniform coverage of a surface by providing for a self-propelled cleaning apparatus.

5. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Louis et al. in view of Camarata et al. and Webb.

Louis et al. discloses a similar cleaning apparatus however fails to disclose a traction driver, drive motor or reversible motor.

Louis et al. discloses a housing including a base and an upright handle (fig. 1, #2, 4).

Louis et al. discloses at least two wheels mounted to the base (fig. 1, unnumbered element to left of #150).

Louis et al. discloses a liquid dispensing system (col. 6, lines 42-60).

Louis et al. discloses a fluid recovery system (col. 4, line 64-col. 5, line 9).

Louis et al. discloses a vacuum source (col. 4, lines 38-41).

Camarata et al. discloses a surface cleaning apparatus having a drive motor connected to a traction driver by way of a direct connection with the transmission (fig. 3, traction driver-

#13,15, motor-2, transmission-#7,89,11). It would have been obvious to one of ordinary skill in the art to provide the traction driver and power drive assembly of Camarata et al. in Louis et al. to aid in reducing operator fatigue and allow for uniform coverage of a surface by providing for a self-propelled cleaning apparatus.

Webb discloses a surface cleaning apparatus with a reversible drive motor for driving a traction driver (col. 4, lines 2-3). It would have been obvious to one of ordinary skill in the art to provide to replace the motor of Louis et al. in view of Camarata et al. with the reversible motor of Webb to avoid the use of the solenoids.

Allowable Subject Matter

6. Claims 1, 10-15, 19, 26-30, 32-36, 41, 43, 45, 47-50, 52 and 54-58 are allowed.

7. Claim 53 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. Claims 16 and 38 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cipolla et al. discloses a self-propelled vacuum cleaner having a direct connection between the motor and the transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Theresa T. Snider
Primary Examiner
Art Unit 1744

8/11/2005

Interview Summary	Application No.	Applicant(s)	
	10/064,723	KASPER ET AL.	
	Examiner	Art Unit	
	Theresa T. Snider	1744	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Theresa T. Snider*. (3)____.

(2) *John McGarry*. (4)____.

Date of Interview: *03 August 2005*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☒ No.
If Yes, brief description: ____.

Claim(s) discussed: *, 10-11,16,19,26-30,32-36,38,41-43,45 and 47-58*.

Identification of prior art discussed: *Martin et al. Frederick et al.*.

Agreement with respect to the claims f)☒ was reached. g)☐ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *See Continuation Sheet*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

_____
Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. McGarry explained that the Amendment After Final of 7/15/2005 puts the allowable subject matter/claims indicated in the Final Rejection of 5/17/2005 into the respective independent claims or into independent form. Mr. McGarry discussed how independen claims 32 and 53 are free of the prior art (Martin et al.) because the claims require the belt tensioner to maintain a predetermined tension on the belt when the base of the clenaer runs in BOTH the forward and reverse direction, as opposed to the prior art which teachs applying tension to the belt in only one direction. Mr. McGarry further pointed out that independent claim 43 is free of the prior art (Frederick et al.) because the art teached the use of a lever, as opposed to a rotatable knob,f as aprt of the lock on the handle. Examiner said she would consider these arguments when reviewing the Final Rejection and considering the Amendment After Final.

Notice of References Cited	Application/Control No. 10/064,723	Applicant(s)/Patent Under Reexamination KASPER ET AL.	
	Examiner Theresa T. Snider	Art Unit 1744	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-1,459,946	06-1923	Camarata et al..	15/340.2
	B	US-2004/0134019	07-2004	Cipolla et al.	015/340.2
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Gary A. Kasper et al.	
For:	EXTRACTION CLEANER WITH POWER DRIVE	
Serial No.:	10/064,723	Examiner: Theresa T. Snider
Filed:	08/09/02	Group Art Unit: 1744
Atty. Docket:	71189-1423	Confirmation No: 4232

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA, 22313-1450.

Date: 10/21/05

☐ transmitted by facsimile to the Patent and Trademark Office. to Examiner Theresa T. Snider at (571) 273-8300.

Signature

Christine M. Judge
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the office action mailed August 15, 2005, kindly amend the above-identified patent application as follows:

Amendments to the Claims appear in the complete listing of claims which begins on page 3 of this paper.

Amendments to the Specification appear on page 2 of this paper.

Remarks/Arguments begin on page 19 of this paper.

Examiner: Theresa T. Snider
Group Art Unit: 1744

Amendments to the Specification

Please amend to title to read as follows:

~~EXTRACTION~~ SURFACE CLEANER WITH POWER DRIVE

Amendments to the Claims

Please amend the claims as shown below in the complete listing of claims.

1. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing and including:~~

~~a liquid dispenser for applying liquid to the surface to be cleaned;~~

~~a fluid supply chamber for holding a supply of cleaning fluid;~~

~~a fluid supply conduit fluidly connected to the fluid supply chamber and to the liquid dispenser for supplying fluid to the dispenser;~~

a ~~fluid~~ suction cleaning ~~recovery~~ system mounted to the housing and including:

a recovery chamber ~~for holding recovered fluid~~;

a suction nozzle;

a working air conduit extending between the recovery chamber and the suction nozzle; and

a vacuum source mounted to the housing and in fluid communication with the recovery chamber for generating a flow of working air from the suction nozzle through the working air conduit and to the recovery chamber to thereby draw dirty ~~liquid~~ material from the surface to be cleaned through the suction nozzle and the working air conduit, and into the recovery chamber;

the improvement which comprises:

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned; and

a power drive assembly including an air drive turbine motor mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned.

2-9. (Cancelled)

10. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 52 wherein a projection of the drive axle onto the one of the radial surfaces of the flywheel defines a diametrical line across the flywheel and the drive wheel contact with the flywheel is along the diametrical line, whereby axial shifting of the drive wheel along the drive axle changes the gear ratio and can also change the direction of rotation of the drive axle.

11. (Currently amended) The ~~extraction~~ surface cleaning apparatus of claim 10 and further comprising a worm gear driven by the motor and wherein the flywheel has an outer circumferential gear edge that is driven by the worm gear.

12-15. (Cancelled)

16. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 53 wherein the belt tensioner assembly comprises a plate slidably mounted to the housing, a pair of wheels rotatably mounted on the plate and the belt is weaved between the wheels so that proper tension is maintained when the belt is driven in either direction.

17-18. (Cancelled)

19. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus according to claim 55 wherein the drive motor is mounted to the handle and further comprising a belt operably connected to the drive motor and the wheel sprocket for driving the traction driver.

20-25. (Cancelled)

26. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 58 and further comprising a liquid dispensing system mounted to the housing and including:

a liquid dispenser for applying liquid to the surface to be cleaned;

a fluid supply chamber for holding a supply of cleaning fluid;

a fluid supply conduit fluidly connected to the fluid supply chamber and to the liquid dispenser for supplying fluid to the dispenser;

wherein the drive actuator further comprises a mounting block slidable on the handle and further comprising a solution valve mechanism in the fluid supply conduit mounted to the sliding block for movement therewith.

27. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 26 and further comprising a solution valve actuator mounted to the handle grip and connected to the solution valve mechanism to control the flow of cleaning fluid through the solution valve mechanism to the liquid dispenser from the fluid supply chamber.

28. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 58 and further comprising a lock for selectively locking the handle grip in the neutral position when the handle is in a reclining position.

29. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 28 wherein the lock comprises an aperture in the handle grip and an aperture in the upper end portion of the handle and apertures aligned with each other when the handle grip is in the neutral position; and

a pin selectively moveable between a locked position wherein the pin is positioned within both of the apertures and an unlocked position wherein the pin is retracted from at least one of the two apertures.

30. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 58 and further comprising a carry handle affixed to the upright handle.

31. (Cancelled)

32. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

at least two wheels mounted to the base for supporting the housing for movement along the surface to be cleaned;

~~a liquid dispensing system mounted to the housing and including:~~

~~a liquid dispenser for applying liquid to the surface to be cleaned;~~

~~a fluid supply chamber for holding a supply of cleaning fluid;~~

~~a fluid supply conduit fluidly connected to the fluid supply chamber and to the liquid dispenser for supplying fluid to the liquid dispenser;~~

a ~~fluid recovery~~suction cleaning system mounted to the housing and including:

a recovery chamber ~~for holding recovered fluid~~;

a suction nozzle;

a working air conduit extending between the recovery chamber and the suction nozzle; and

a vacuum source mounted to the housing and in fluid communication with the recovery chamber for generating a flow of working air from the suction nozzle through the working air conduit and through the recovery chamber to thereby draw dirty ~~liquid~~ material from the surface to be cleaned through the suction nozzle and the working air conduit, and into the recovery chamber;

a drive motor comprising a unidirectional electric motor mounted on the housing;

a transmission assembly operably connected between the drive motor and at least one of the wheels for selectively connecting the drive motor with the at least one wheel, the transmission assembly including a first gear train selectively connected between the drive motor and the at least one wheel for driving the base in a forward direction;

a second gear train selectively connected between the drive motor and the at least one wheel for driving the base in a reverse direction;

a clutch mechanism moveable between the first and second gear trains to alternately connect the first and second gear trains between the drive motor and the at least one wheel;

a belt drive connecting the transmission assembly to the at least one wheel, the belt drive including a tension adjuster for maintaining a predetermined tension on the belt when the base is driven in the front and the rear directions;

the handle having a grip mounted to an upper end thereof, the grip being slidably mounted on the upper end of the handle between an extended position, a neutral position and a retracted position;

a drive actuator mounted on the grip portion and moveable therewith;

a link between the grip and the clutch to move the clutch between the first gear train and the second gear train and to a neutral position between the two gear trains.

33. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus according to claim 32 and further comprising a direct connection between the drive motor and the transmission assembly.

34. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus according to claim 33 wherein the drive motor and the transmission assembly are both mounted to the upright handle.

35. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus according to claim 32 wherein the drive motor and the transmission assembly are both mounted to the upright handle.

36. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus according to claim 32 wherein the vacuum source includes a vacuum motor and the vacuum motor and the drive motor are independent of each other.

37- 40. (Cancelled)

41. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus according to claim 37 wherein the fluid recovery system includes a recovery tank and the recovery tank is mounted in the base.

42. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;~~

a ~~fluid recovery~~suction cleaning system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty ~~liquid~~ material from the surface to be cleaned through the suction nozzle;

a traction driver ~~mounted to~~ supporting the base for powered movement of the housing along the surface to be cleaned;

a drive motor having an output shaft;~~,~~

a transmission assembly having a gear mounted to the drive motor output shaft to provide ~~and~~ a direct connection between the drive motor and the transmission assembly, all mounted to the housing, wherein the transmission assembly has an output shaft offset from and parallel to the drive motor output shaft ~~is~~ connected to the traction driver for selectively propelling the base over the surface to be cleaned.

43. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward, neutral and rearward positions;

~~a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;~~

a ~~fluid recovery~~suction cleaning system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty ~~liquid~~ material from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned in a forward and reverse direction;

a connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base assembly in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively; and

a lock including a rotatable knob mounted on the handle and accessible to the operator for selectively locking the handle grip in the neutral position.

44. (Cancelled)

45. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 43 wherein the handle grip is biased to the neutral position for disablement of the power drive assembly.

46. (Cancelled)

47. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid and a liquid dispenser for applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;~~

a ~~fluid recovery~~suction cleaning system mounted to the housing and including a suction nozzle and a vacuum source, including a vacuum motor, in fluid communication with the suction nozzle to draw dirty ~~liquid~~ material from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned;

a flywheel mounted for rotation about a central axis having a radial surface;

the traction driver is non-rotatably mounted on a drive axle and the drive axle is mounted for rotation about an axis parallel and adjacent to the flywheel radial surface; and

a drive wheel is axially shiftable and non rotatably mounted on the drive axle for rotation therewith, and the drive wheel has an outer circumferential surface that frictionally engages the radial surface of the fly wheel and is driven thereby to transfer rotary motion of the fly wheel to rotary motion of the drive axle;

wherein shifting of the drive wheel along the drive axle from one side of the radial surface to the another side changes the direction of rotation of the drive wheel.

48. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 47 wherein the radial surface has a recessed area between the sides of the radial surface and drive wheel is adapted to be positioned in registry with the recessed area, out of contact with the radial surface to disconnect the flywheel from the drive wheel.

49. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward, neutral and rearward positions;

a liquid dispensing system mounted to the housing and including a fluid supply chamber for holding a supply of cleaning fluid, a liquid dispenser and a fluid supply conduit, including a solution valve, between the liquid fluid supply chamber and the liquid dispenser for selectively applying cleaning fluid from the fluid supply chamber to the surface to be cleaned;

a fluid recovery system mounted to the housing and including a suction nozzle and a vacuum source in fluid communication with the suction nozzle to draw dirty liquid from the surface to be cleaned through the suction nozzle;

a traction driver mounted to the base for powered movement of the housing along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned in a forward and reverse direction;

a connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively;

wherein the connection between the handle grip and the power drive assembly includes a mounting block, slidable on the handle; and

the solution valve is mounted to the mounting block for movement therewith.

50. (Currently amended) ~~The extraction surface~~The surface cleaning apparatus of claim 49 and further comprising a cleaning solution actuator mounted on the handle grip and connected to the solution valve for selectively opening the solution valve to control the supply of cleaning fluid to the liquid dispenser.

51. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

a suction ~~fluid recovery~~cleaning system mounted to the housing;

a traction driver ~~mounted to~~ supporting the base ~~for supporting the housing~~ for movement along the surface to be cleaned;

a reversible electric drive motor mounted to the housing and having an output shaft ~~selectively~~ coupled to the traction driver through a transmission that has a gear mounted to the drive motor output shaft and further has an output shaft parallel to and offset from the motor output shaft for selectively driving the traction driver in two directions; and

a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver to propel the base over the surface to be cleaned.

52. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

~~a fluid recovery~~suction cleaning system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

an electric drive motor mounted to the housing and a transmission assembly operably connected between the electric drive motor and the traction driver to selectively drive the traction driver in two directions;

a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver to propel the base over the surface to be cleaned; and

wherein the transmission assembly comprises:

a flywheel mounted for rotation about a central axis having a pair of parallel radial surfaces;

the traction driver is non-rotatably mounted on a drive axle and the drive axle is mounted for rotation about an axis parallel and adjacent to one of the flywheel radial surfaces;

a drive wheel is axially shiftable and non rotatably mounted on the drive axle for rotation therewith, and the drive wheel has an outer circumferential surface that rolls along one of the radial surfaces of the fly wheel to transfer rotary motion of the fly wheel to rotary motion of the drive axle;

wherein shifting of the drive wheel along the drive axle changes the gear ratio between the fly wheel and the drive wheel.

53. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

~~a fluid recovery~~ suction cleaning system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

an electric drive motor mounted to the housing and a transmission assembly operably connected between the electric drive motor and the traction driver to selectively drive the traction driver in two directions, wherein the transmission assembly is connected to the traction driver through a belt;

a belt tensioner assembly mounted to the housing to maintain tension on the belt in each of the two directions. and

a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver to propel the base over the surface to be cleaned.

54. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

~~a fluid recovery~~ suction cleaning system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

a drive motor mounted to the housing and connected to the traction driver through a flexible cable in driving relationship therewith for selectively propelling the base over the surface to be cleaned.

55. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

~~a fluid recovery~~suction cleaning system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

a wheel sprocket non-rotatably connected to the traction driver for movement therewith; and

a drive motor mounted on the housing in driving relationship with the wheel sprocket for selectively propelling the base over the surface to be cleaned.

56. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

~~a fluid recovery~~suction cleaning system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned and comprising a drive brush mounted for rotation about a horizontal axis on the base;

a sprocket non-rotatably mounted to the drive brush;

a drive motor mounted to the housing; and

a belt drive between the motor and the sprocket for driving the drive brush;

wherein rotation of the drive brush results in movement of the base across the surface to be cleaned and selectively propels the base over the surface to be cleaned.

57. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

~~a fluid recovery~~ suction cleaning system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned and comprising a track assembly including:

a pair of track sprockets mounted on the base for rotation about parallel, horizontally spaced axes; and

at least one track belt reeved around the track sprockets and in contact with a surface to be cleaned; and

a drive motor mounted on the housing and operably connected to one of the track sprockets for selectively driving the same for selectively propelling the base over the surface to be cleaned.

58. (Currently amended) ~~An extraction surface~~A surface cleaning apparatus having:

a housing including a base and an upright handle pivotally mounted to the base for manipulation of the base along a surface to be cleaned;

~~a liquid dispensing system mounted to the housing;~~

~~a fluid recovery~~ suction cleaning system mounted to the housing;

a traction driver mounted to the base for supporting the housing for movement along the surface to be cleaned;

a power drive assembly mounted to the housing and connected to the traction driver for selectively propelling the base over the surface to be cleaned;

wherein the power drive assembly includes a handle grip slidably mounted on an upper end portion of the handle for axial movement along the handle between forward and rearward positions for selectively controlling the movement of the base in a forward and reverse direction over the surface to be cleaned; and

wherein the handle grip is biased to a neutral position between the forward and rearward positions for disablement of the power drive assembly when the handle is in a reclining position.

59. (New) A surface cleaning apparatus according to claim 1 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

60. (New) A surface cleaning apparatus according to claim 32 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

61. (New) A surface cleaning apparatus according to claim 43 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

62. (New) A surface cleaning apparatus according to claim 47 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

63. (New) A surface cleaning apparatus according to claim 52 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

64. (New) A surface cleaning apparatus according to claim 53 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

65. (New) A surface cleaning apparatus according to claim 54 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

65. (New) A surface cleaning apparatus according to claim 55 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

66. (New) A surface cleaning apparatus according to claim 56 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

67. (New) A surface cleaning apparatus according to claim 57 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

68. (New) A surface cleaning apparatus according to claim 58 and further comprising a liquid dispensing system mounted to the housing and adapted to distribute liquid cleaning fluid onto the surface to be cleaned; and wherein the suction cleaning system is adapted to recover dirty liquid from the surface to be cleaned.

REMARKS

By the present amendment, the title of the application as well as the preamble to each of the claims has been changed to read "Surface Cleaner" rather than "Extraction Surface Cleaner." In addition, the independent claims have been amended to remove the extraction system components from the claims so that all of the independent claims are generic to both extraction cleaners as well as vacuum cleaners. New claims 59-68 depend from the independent claims to set forth the elements of the liquid dispensing system. The amendments are believed appropriate because the Examiner has consistently used power drive elements from vacuum cleaners to reject the claims. Therefore, it appears appropriate to broaden the claims to cover vacuum cleaners as well as extraction cleaners. All of the claims distinguish over the references in the mechanics of the power drive system and not in the elements of extraction cleaners.

In addition, claims 42 and 51 have been amended to set forth elements of a transmission assembly in part to clarify a direct connection between the drive motor and the transmission assembly and to define some elements of the transmission assembly. Support for these amendments is found in the specification as filed, in particular FIGS. 5, 10, and 15, and the passages in the written description of the invention relating to these drawings.

Further, claim 38 has been cancelled and claim 53 has been amended to insert the word "assembly" after "transmission".

In the Office Action, claims 16, 38, and 53 were rejected under 35 U.S.C. § 112 second paragraph as being indefinite. It is believed that the cancellation of claim 38 and the amendment to claim 53 obviates this rejection.

Claim 42 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Louis et al. in view of Camarata et al. U.S. Patent No. 1,459,946. This rejection is respectfully traversed.

In view of the Appilcants' amendments to claim 42, it would appear that claim 42 distinguishes over any combination of Louis et al. in view of Camarata et al. '946 or over Camarata et al. '946 by itself. In particular, claim 42 has been amended to set forth the direct connection between the drive motor and the transmission and elements of the transmission that distinguish over Camarata et al. More specifically, claim 42 has been amended to define the transmission as having a gear which is mounted to the output shaft of the drive motor and further having an output shaft which is parallel to but offset from the drive motor shaft. This concept is not disclosed in Camarata et al. '946. In

Examiner: Theresa T. Snider
Group Art Unit: 1744

Camarata et al. '946, the motor output shaft is perpendicular to the transmission outlet shaft which is believed to be element 10 in Camarata et al. '946. In addition, elements 11, 13, and 18 are also believed to be elements of the Camarata et al. '946 transmission assembly.

It is therefore believed that claim 42 patentably defines over the Louis et al. and Camarata et al. '946 references, either singularly or in combination.

Claim 51 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Louis et al. in view of Camarata et al. '946 and further in view of Webb U.S. Patent No. 4,167,799. This rejection is respectfully traversed.

The Webb '799 patent discloses a carpet cleaning machine wherein a drive motor drives a traction driver mounted to the base and a handle pivotally mounted to the base has controls and handle grips for controlling the direction of the drive motor.

It is believed that amendments to claim 51 define over any combination of Louis, Camarata et al. '946, and Webb '799. The references, either singularly or in combination do not disclose a surface cleaning machine in which a reversible motor has a direct connection to the transmission through a gear mounted on the output shaft and the transmission itself has an output shaft which is spaced from but parallel to the motor output shaft.

In view of the foregoing, it is submitted that all of the claims are in condition for allowance. Early notification of allowability is respectfully requested.

Respectfully submitted,

Gary A. Kasper et al.

Dated: 10-21-05

By: _____

John E. McGarry, Reg. No. 22,360
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Grand Rapids, Michigan 49503
616-742-3500

G0176965

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NOTICE OF ALLOWANCE AND FEE(S) DUE

20915 7590 01/23/2006

MCGARRY BAIR PC
171 MONROE AVENUE, N.W.
SUITE 600
GRAND RAPIDS, MI 49503

EXAMINER	
SNIDER, THERESA T	
ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 01/23/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,723	08/09/2002	Gary A. Kasper	71189-1423	4232

TITLE OF INVENTION: EXTRACTION CLEANER WITH POWER DRIVE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$300	$1700	04/24/2006

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 07/05) Approved for use through 04/30/2007.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,723	08/09/2002	Gary A. Kasper	71189-1423	4232

TITLE OF INVENTION: EXTRACTION CLEANER WITH POWER DRIVE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$300	$1700	04/24/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
SNIDER, THERESA T	1744	015-340200

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

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4b. Payment of Fee(s):

☐ A check in the amount of the fee(s) is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,723	08/09/2002	Gary A. K[illegible]	71189-1423	4232

20915 7590 01/23/2006

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GRAND RAPIDS, MI 49503

EXAMINER	
SNIDER, THERESA T	
ART UNIT	**PAPER NUMBER**
1744	

DATE MAILED: 01/23/2006

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 405 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 405 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability	Application No.	Applicant(s)	
	10/064,723	KASPER ET AL.	
	Examiner	Art Unit	
	Theresa T. Snider	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amdt. of 10/21/2005*.

2. ☒ The allowed claim(s) is/are *1,10,11,16,19,26-30,32-36,42,43,45 and 47-69*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *12/19/2005* .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Theresa T. Snider
Primary Examiner
Art Unit: 1744

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John McGarry on 12/19/2005.

The application has been amended as follows:

In the Claims

Claim 41 has been canceled.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ric Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Theresa T. Snider
Primary Examiner
Art Unit 1744

THERESA T. SNIDER
PRIMARY EXAMINER

12/19/2005

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	10/064,723	KASPER ET AL.	
	Examiner	Art Unit	
	Theresa T. Snider	1744	

All Participants:

(1) *Theresa T. Snider*.

(2) *John McGarry*.

Status of Application: _____

(3) _____.

(4) _____.

Date of Interview: *19 December 2005*

Time: _____

Type of Interview:

☒ Telephonic
☐ Video Conference
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☐ Yes ☒ No
If Yes, provide a brief description:

Part I.

Rejection(s) discussed:

N/A

Claims discussed:

1,10-11,16,19,26-30,32-36,41-43,45 and 47-68

Prior art documents discussed:

N/A

Part II.

SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:

Informed Mr. McGarry of allowability of claims 1, 10-11,16,19,26-30,32-36,42-43,45 and 47-68. Mr. McGarry agreed to cancel claim 41 because it's dependent on a canceled claim

Part III.

☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.

☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)

Notice of References Cited	Application/Control No. 10/064,723	Applicant(s)/Patent Under Reexamination KASPER ET AL.	
	Examiner Theresa T. Snider	Art Unit 1744	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-3,350,960	11-1967	LAMBURN ALAN S; et. al.	475/207
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

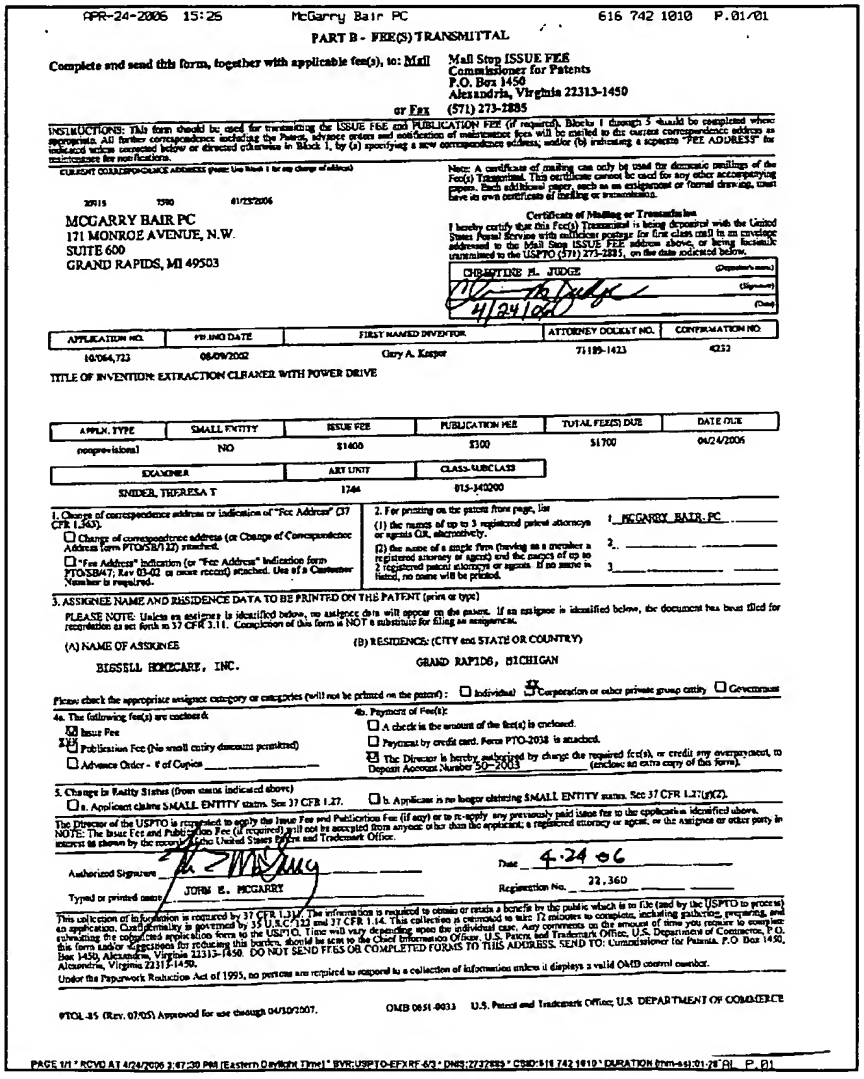
Auto-Reply Facsimile Transmission

TO: Fax Sender at 616 742 1010

Fax Information
Date Received: 4/24/2006 3:07:30 PM [Eastern Daylight Time]
Total Pages: 1 (including cover page)

ADVISORY: This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received Cover Page =======>



APR-24-2006 15:25 McGarry Bair PC 616 742 1010 P.01/01

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 or Fax (571) 273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

20915 7590 01/23/2006

MCGARRY BAIR PC
171 MONROE AVENUE, N.W.
SUITE 600
GRAND RAPIDS, MI 49503

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

CHRISTINE H. JUDGE
4/24/06

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,723	08/09/2002	Gary A. Kasper	71189-1423	4252

TITLE OF INVENTION: EXTRACTION CLEANER WITH POWER DRIVE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1400	$300	$1700	04/24/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
SNIDER, THERESA T	1744	015-340200

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 MCGARRY BAIR PC
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)
PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.
(A) NAME OF ASSIGNEE: BISSELL HOMECARE, INC.
(B) RESIDENCE: (CITY and STATE OR COUNTRY): GRAND RAPIDS, MICHIGAN

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:
☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies

4b. Payment of Fee(s):
☐ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 50-2003 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)
☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date 4-24-06
Typed or printed name JOHN E. MCGARRY Registration No. 22,360

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.
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PTOL-85 (Rev. 07/05) Approved for use through 04/30/2007. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PAGE 1/1 * RCVD AT 4/24/2006 3:07:30 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/3 * DNIS:2738300 * CSID:616 742 1010 * DURATION (mm-ss):01-28

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission	2

Application Number	11/064,723
Filing Date	February 23, 2005
First Named Inventor	Tsann Lin
Art Unit	2653
Examiner Name	Castro, Angel A.
Attorney Docket Number	SJO9-2000-0147US2

ENCLOSURES *(Check all that apply)*

- [x] Fee Transmittal Form
  - [x] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
  - [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) (please Identify below):

Response to Restriction Requirement; and Return Postcard.

Remarks

Please file.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Intellectual Property Law Offices		
Signature	Robert O. Guillot		
Printed name	Robert O. Guillot		
Date	March 22, 2006	Reg. No.	28,852

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature	Patricia Beilmann		
Typed or printed name	Patricia Beilmann	Date	March 22, 2006

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL For FY 2006

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 120

Complete if Known	
Application Number	11/064,723
Filing Date	February 23, 2005
First Named Inventor	Tsann Lin
Examiner Name	Castro, Angel A.
Art Unit	2653
Attorney Docket No.	SJO9-2000-0147US2

METHOD OF PAYMENT (check all that apply)

☐ Check ☑ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☐ Deposit Account Deposit Account Number: _____ Deposit Account Name: _____

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☑ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☑ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☑ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims		Extra Claims	Fee ($)	Fee Paid ($)
_____	- 20 or HP =	_____	x _____	= _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims		Extra Claims	Fee ($)	Fee Paid ($)
_____	- 3 or HP =	_____	x _____	= _____

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims	
Fee ($)	Fee Paid ($)
_____	_____

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets		Extra Sheets		Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
_____	- 100 =	_____	/ 50 =	_____ (round up to a whole number)	x _____	= _____

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	
Other (e.g., late filing surcharge): One month extension of time	$120

SUBMITTED BY

Signature	Robert Guillot	Registration No. (Attorney/Agent) 28,852	Telephone (408) 558-9950
Name (Print/Type)	Robert O. Guillot		Date March 24, 2006

UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Tsann Lin

Atty Ref.: SJO9-2000-0147US2

Serial No.: 11/064,723

Group Art Unit: 2653

Filed: February 23, 2005

Examiner: Castro, Angel A.

For: **GIANT MAGNETORESISTANCE SENSOR WITH STITCHED LONGITUDINAL BIAS STACKS AND ITS FABRICATION PROCESS**

RESPONSE TO RESTRICTION REQUIREMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

Dear Sir:

Responsive to the Election/Restriction Requirement mailed February 22, 2005, Applicant elects Group II, claims 2-7 for further prosecution, without traverse.

Should the Examiner have any questions or comments a telephone conference at the number set forth below is requested.

Respectfully submitted,

Date: March 24, 2006

ROBERT O. GUILLOT
Reg. No. 28,852

IPLO®
Intellectual Property Law Offices
1901 S. Bascom Avenue, Suite 660
Campbell, CA 95008
Telephone: (408) 558-9950
Facsimile: (408) 558-9960

CERTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited on March 24, 2006 with the U.S. Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
Date: March 24, 2006

Patricia Beilmann